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9 SEPTEMBER 1986

# USSR Report

## AGRICULTURE

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USSR REPORT  
AGRICULTURE

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MAJOR CROP PROGRESS AND WEATHER REPORTING

PEST, DISEASE FORECAST FOR BELORUSSIAN SSR

Minsk SELSKAYA GAZETA in Russian 12 Jun 86 p 3

[Article by Ye. Kolonitskaya, head of Republic Forecast and Diagnosis Laboratory, and N. Kharchenko, head of Forecast Laboratory BelNIIZR (Belorussian Scientific Research Institute for Plant Protection): "Forecast: Appearance and Spread of Agricultural Plant Pests and Diseases"]

[Text] Everywhere, with the exception of Vitebsk Oblast, potatoes are being infested by Colorado beetles and their eggs. These pests have already infested 15-46 percent of the plants in Brest and Gomel oblasts. The larvae have started hatching. Mass hatching in this zone is expected by the end of the second 10 days in June and in some sections during the fourth 5 day period selective treatment will be needed if infestation exceeds 20 larvae per plant on 10 percent of the plants.

In the republic's central rayons about 3-6 percent of the plants are infested. Massive egg laying is expected in this zone in the second ten days in the month. Crops should be monitored everywhere and, when needed, selectively treated.

To improve potatoes' disease resistance it is recommended to treat crops with microdoses of copper (0.02-1 percent solutions of 98 percent dissolved copper sulfate powder) when the plants reach 15-20 cm tall. Seed potatoes should be subjected to fitoprochistka [possibly: plant treatment] at that time.

Sugar beet miner flies are continuing to lay eggs and their larvae are continuing to damage sugar beets. A single treatment of beet crops has not everywhere had the desired effect because of the extended egg laying period and the large number of insects. Therefore, in order to reduce larvae density it is necessary to make repeated applications of systemic insecticides (phosphamides and anthio).

Infestations of greenbug have been noted everywhere on winter and spring grain crops. Fields should be surveyed and, if 1.2-2 individuals are found per head, treated.

During the second ten day period in June Cruciferae crops and feed crops (spring rape, field cabbage, oil radish [redka maslichnaya] and others) will

be damaged by rape sawflies, while the seeds of these crops will be damaged by pollen beetles.

Everywhere Codling moths are still flying. Massive egg infestations are noted in the southern rayons. Here it is necessary to make a second application of Tricogrammatidae. In the republic's central and northern zones the first application of Tricogrammatidae is required in the third and fourth five-day periods of June.

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MAJOR CROP PROGRESS AND WEATHER REPORTING

CROP PEST FORECAST FOR THIRD TEN DAYS IN MAY IN BELORUSSIAN SSR

Minsk SELSKAYA GAZETA in Russian 22 May 86 p 3

[Article by Ye. Kolonitskaya, head of Republic Forecast and Diagnosis Laboratory, and N. Kharchenko, head of Forecast Laboratory BelNIIZR [Belorussian NII for Plant Protection]: "Forecast: Appearance and Spread of Agricultural Plant Pests in Third Ten Day Period in May in Belorussian SSR"]

[Text] Sugar beets everywhere are being infested by predators, the most dangerous of which are sugar beet leaf miner fly and carrion beetle. Fly eggs are found not only in the republic's southern and central rayons, but also in Vitebsk Oblast.

On some sugar beet fields at the Rassvet Kolkhoz, Iyatsevicheskiy Rayon and the Sovkhoz imeni Kalinin, Mozyrskiy Rayon there are more than 2-8 female beetles per square meter. Flea-beetles are causing damage everywhere. Leaf beetles are laying massive amounts of eggs in goosefoot weed infestations in sugar beet fields. During the last ten days in May, when the larvae hatch, the damage they do will increase.

Fields should be strictly monitored and when pest populations reach threshhold levels chemicals should be applied and agronomic measures taken. Timely cultivation and top dressing with nitrogen fertilizers are effective against beet root eaters.

Every year cabbage fields are infested by cabbage maggots and snout beetles. As a rule, planting cabbage in the open leads to large plant losses and sometimes means replanting the fields. It is therefore necessary to observe the plants (examining the soil near them and separating plants into bunches of 3-5). If larvae are found prior to planting, the ground should be sprayed with a 0.2 percent solution of 80 percent chlorophosphate.

During the onset of budding planted seeds and settings of Cruciferae family vegetable plants will be infested by pollen beetles. Treatment is necessary if there are 3 or more larvae per plant.

There are large numbers of bean and pea weavils on the sprouts of pulse crops (peas, vetch, fodder beans). Clover seed-eaters will be a danger to clover

seeds. There should be chemical applications at the onset of white and red clover budding and on sections of red clover which have not been mowed.

Insecticide applications should continue on timothy grass seed plants in the booting stage on which the number of timothy flies reaches 30 and more per unit of account. During tasseling of awnless brome grass grown for seed it is necessary to apply insecticides against brome grass fly and brome grass mosquito.

Crops have already blossomed in the southern zone. Here it is time to carry out combined treatment against a complex of pests and diseases. By the end of the month this time will arrive in the republic's central and northern rayons.

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## MAJOR CROP PROGRESS AND WEATHER REPORTING

### CROP PEST, DISEASE FORECAST FOR FIRST TEN DAYS OF JUNE

Minsk SELSKAYA GAZETA 3 Jun 86 p 2

[Article by L. Stalbovskaya, senior agronomist, Republic Forecast Laboratory, and N. Kharchenko, head of Forecast Laboratory BelNIIZR (Belorussian Scientific Research Institute for Plant Protection): "Forecast: Appearance and Spread of Agricultural Plant Pests and Diseases for First Ten Days of June"]

[Text] On late planted fields in the republic's northern rayons there is still a danger of damage to spring grain crops by the Swedish fly. Taking damage thresholds into account, insecticide applications should continue.

Helminthosporiosis has been noted on barley everywhere. The disease is still only weakly developed. Fungicide treatment is necessary on elite crops (especially the susceptible varieties Favorit, Zazerskiy-85, Ida, Roland and others) in the tillering and the beginning of ear emergence. Single treatment during heading is advisable on commercial plantings. In the southern rayons the time for this treatment has already begun, while in the central rayons it is during the first ten days in June.

Powdery mildew and septoria spot have appeared everywhere on winter grain crops. The infestations are spreading. It is necessary to monitor crops, especially those grown by intensive technology, and apply fungicides if these diseases appear on the 3rd leaves at the end of booting -- heading.

Sugar beet crops in all beet planting rayons are being actively infested by sugar beet leaf miner flies. The extent of infestation is already great and the number of pests continues to increase. This is especially dangerous due to the early infestation of crops (during the seed-lobe phase). In foci there is still danger of damage to beets by female carrion beetles. It is mandatory to apply insecticides against these pests.

Clover seed-eaters are a huge danger to seed plantings of clover during the budding stage. Everywhere, the numbers of this pest considerably exceed the threshold value. Protective measures, other than mowing, should be taken on fields of clover planted for seed. It is recommended to mow white clover when it is very ripe, and to apply insecticide after harvest.

Bean and pea weevils will continue to damage pulse crop sprouts. When the threshold value is reached crops should be treated.

Winter rape seed crops in the budding stage -- at the onset of blossoming, when large numbers of pollen beetles appear. If there are 3 or more individuals per plant, applications are necessary.

Late varieties of cabbage set out in fields will be infested by turnip flea beetles. The danger of damage can be very great during prolonged hot dry weather. Cabbage maggot, the numbers of which are great this year, can also be harmful.

Intensive flights of codling moths are seen in the republic's southern and central zones. Egg laying has begun in the southern rayons. Trichogrammatidae applications on private plots should be organized during the first five day period of June. In the central rayons this measure is to be taken in the second five day period of June.

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## MAJOR CROP PROGRESS AND WEATHER REPORTING

### VEGETABLE GROWERS INFORMED OF FORTHCOMING TASKS

Moscow SELSKAYA GAZETA in Russian 12 Jun 86 p 3

[Article: "Attention Vegetable Growers"]

[Text] In recent days it has rained everywhere, creating favorable conditions for vegetable growth, completing the planting and setting of late crops and massive crop care work.

During these days vegetable growers' first task is to complete cabbage planting and to upkeep work on planted areas. On sections where stand thinness is 50 and more, it is necessary to replant, and in the remaining cases to set crops in quantities sufficient to assure plant density of at least 42,000 plants per hectare. Farms with excess cabbage seedlings should use them for above plan planting.

It is important not to overlook the better deadlines for vegetable management. This includes:

Quick and thorough interrow tillage by specialized mechanized links;

On all crops, simultaneously with interrow tillage, apply the first top dressing of crystallin to table beets, carrots, first crop cabbages and other crops;

On each farm constantly monitor plant pests and diseases, and, when necessary, organize the fight against them. This above all applies to cabbage and beets;

Prevent violations of schedules in the stage planted green and spice crops, above all cauliflower, dill, lettuce and spinach;

Everywhere organize preparations for planting cabbage for 1987. Sections should be selected, areas determined, fertilizer and lime applications and weed control begun and clean fallow selected for summer and fall.

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## MAJOR CROP PROGRESS AND WEATHER REPORTING

### NEED FOR WEED, PEST, DISEASE CONTROL MEASURES STRESSED

Moscow SELSKAYA ZHIZN in Russian 3 Jul 86 p 1

Article by A. Torichko, Altay Kray: "Sowthistle and Amaranth are Smothering the wheat"

Text On many farms in the Altay region, where grain crops are being cultivated using intensive technology, a campaign is not being waged against weeds and diseases in accordance with their phases.

The Altay grain fields are vast in size. Here intensive technology alone is being employed in the cultivation of 1,200,000 hectares of wheat. And the condition of the fields is pleasing to the eye -- healthy, dense seedlings have already achieved the tillering phase and in the case of early sowings -- the shooting phase. The time is at hand for waging an active campaign against weeds and plant pests and diseases, for treating the crops with growth regulators and for carrying out other urgent operations on the intensive fields.

The grain growers in Krasnogorskiy, Soltoskiy, Smolenskiy, Altayskiy, Klyuchevskiy, Biyskiy, Topchikhinskiy and some other rayons, all of whom carried out weed control operations in a timely manner on their weed-covered tracts, have applied themselves well to this mandatory agricultural method included in the intensive technology complex. However, a majority of the kray's kolkhozes and sovkhozes do not view this important work as being obligatory: the periods for carrying out the work are elapsing and the Tabunskiy, Uglovskiy and other farms have not yet even started to treat their crops with herbicides. By the end of June, chemical weed control operations had been carried out on only 3-12 percent of the planned areas in such large grain rayons as Khabarskiy, Kalmanskiy, Kurinskiy, Slavgorodskiy, Ust-Kalmanskiy and Aleyskiy.

"What is the problem?" inquired responsible workers attached to the kray-agroprom and the kray's plant protection station, "Are the Altay grain fields really threatened by weeds, pests and diseases?"

"How could it be otherwise!" was the response. "This year alone the plans call for 1,200,000 hectares of grain crops to be treated with herbicides. The beet webworm has already made an appearance in the Kulundinskaya, central and piedmont zones, in Soloneshenskiy Rayon the crops are threatened by the leaf beetle and centers of leaf rust have been detected on many farms throughout the

kray. Contracts have been concluded with agricultural aviation for combatting this evil and more than 1,500 machines are available at kolkhozes and sovkhozes throughout the kray for treating the crops with chemicals.

In short, the potential is available. But what has been done? Prior to the beginning of the last 5-day period in June, when the shooting phase commenced out on the principal tracts, herbicides had been applied to only slightly more than 200,000 hectares of grain crops and only one fifth of the spraying units had been included in the work.

Many examples of an indifferent attitude being displayed towards tending the crops could be cited. Many agronomists are still employing antiquated methods -- they maintain that their task is to sow and that whatever subsequently grows in the soil is not dependent upon them. And although intensive technology assumes the development of high and stable yields under all types of weather conditions, they still set their hopes on the heavenly office here. Meanwhile, the crops are becoming overgrown with weeds and thinned out by pests and diseases.

Typical examples of this can be found in Talmenskiy Rayon, which we visited in late June. Here they had not yet selected the chief agronomist. I held a discussion with the RAPO /rayon agroindustrial association/ chairman A.D. Ageyenko. He was satisfied with the condition of the crops.

"In order to carry out the plan for selling grain to the state and for creating our seed and forage funds" he stated, "we must obtain not less than 16-17 quintals of grain per hectare. And this yield can and must be greater." added Aleksandr Dmitrievich as he summed up the situation.

"Why have you planned to obtain only 14.8 quintals? Indeed, last year the average yield for the rayon was higher and amounted to 16.7 quintals per hectare."

"During damp years our varieties of wheat do not ripen and lodge to a severe degree. And this year the summer is a rainy one" replied the RAPO chairman.

"Thus, use must be made of the TUR preparation, which not only shortens and strengthens the straw but also accelerates the ripening of the grain."

"We will use it this year, despite the fact that it is in short supply. We need 27 tons and have only nine."

"What do you mean 'we will'? This work should already have been completed."

"The equipment is being used for haying operations and the personnel are carrying out weed control work among the beet plantings."

Such was the conversation held with the chairman of the Talmenskiy RAPO. An obsolete and conservative attitude towards the grain fields was reflected in it just as in a drop of water. Although the rayon's farms have 46 spraying units, not one of them has as yet been placed in operation. At the Kolkhoz imeni Lenin where, in the words of Ageyenko, the treatment of the crops with

herbicides has commenced, we tried in vain to see at least one unit. We were unable to find either the equipment or the personnel responsible for operating it. The chief agronomist at this farm, A.V. Chestyukov, was unable to say what had happened to them. It later turned out that the reason was the same as that for other farms throughout the rayon -- the equipment and personnel were being used for "more important" work.

And what about the grain?

At the Kolkhoz imeni Lenin and the Talmenskiy Sovkhoz, where intensive technologies are being employed on more than 2,000 hectares, and especially at the Strana Sovetov Kolkhoz, the fields of which we visited, many tracts have become overgrown with sowthistle, common winter cress, amaranth, bristle grass, Tatar black bindweed and wild oats. But nobody is alarmed by this. The director of the Talmenskiy Sovkhoz, Yu.V. Yakunin (the farm does not have a chief agronomist), believes that the crops are sufficiently clean and that there is no need for spending additional funds for treating them. Meanwhile, no decision has been made with regard to use of the TUR preparation. The chief agronomist at the Kolkhoz imeni Lenin, A.V. Chestyukov, promises to commence weed control among the grain crops following the sugar beets. He generally does not plan to treat the crops with the TUR preparation, since he is of the opinion that mineral fertilizer was applied in accordance with the norm and based upon soil analyses and thus there is no threat of the wheat lodging. With regard to the forthcoming harvest, the attitude towards it is somewhat incomprehensible.

"What sense does it make to spend time working if as a rule our wheat does not ripen?" asked the kolkhoz's chief agronomist. "This year, owing to the spring rainfall, we again sowed late."

"Is this why you did not use the TUR preparation, which is presently being used for shortening the ripening period?" I asked Aleksey Vasilyevich. In response, he merely shrugged his shoulders.

The optimum periods for treating the grain crops are elapsing. The shooting phase is coming to an end in the wheat and in a few days it will be too late to carry out weed control work, to employ the TUR preparation or to combat other types of plant pests and diseases. The kray's agroindustrial committee and the rayon associations must stimulate the work aimed at continuing the important agricultural methods employed in tending the crops and they must ensure the development in the Altay Kray of a harvest that is in keeping with the tasks of the 12th Five-Year Plan.

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## MAJOR CROP PROGRESS AND WEATHER REPORTING

### INTENSIVE TECHNOLOGY FOR GRAIN PRODUCTION IN NOVOSIBIRSK OBLAST

Moscow SELSKAYA ZHIZN in Russian 9 Jul 86 p 1

Article by P. Chernov, Novosibirsk Oblast: "And a Green Fire Among the Crops"

Text This is the second year now that the Novosibirsk farmers have been employing intensive technology for cultivating wheat on 700,000 hectares. The principal tracts are located in the steppe and southern forest-steppe zones, where the ecological conditions make it possible to obtain high quality grain. This year not only individual farms but in fact entire rayons plan on obtaining not less than 20-22 quintals of grain per hectare from their intensive fields. Good moisture conditions and applications of adequate quantities of mineral fertilizer are having a favorable effect on the tillering and development of the plants.

The tending of the crops is continuing at the present time. Network graphs have been developed and are being used for carrying out the work within the limits of the optimum periods called for in the scientifically sound system of farming for each rayon.

The "main thrust" of intensive technology is that of protecting plants against pests, diseases and weeds. Unfortunately, the mistakes made last year, when some farms failed to employ chemical means for combating weeds, are once again being repeated this year. As a result, a "green fire" is presently flaring up even on those areas which, according to forecasts by specialists, are considered to be satisfactory. By the beginning of July, the farmers had carried out chemical weed control work on 437,000 hectares of a planned 1 million hectares.

Healthy growth in the wheat this year may bring about a lodging of the crop at the moment of grain ripening, especially on clean fallow where raised dosages of nitrogen were applied. The treatment of the crop with the TUR preparation must be started. The oblast's farmers had intended to use it on not less than 200,000 hectares. But by the beginning of July they had succeeded in carrying out this work on only one fourth of the area. No chemicals were available!

They are waiting for them to be supplied from Ufa and Kemerovo Oblast. The best periods for treating the crops with the TUR preparation and herbicides are elapsing and the suppliers appear to be in no hurry to deliver the needed materials.

The problem is further aggravated by the fact that the production plants are supplying the chemicals in large 50-ton tanks, but some rayons require them in 15-20 ton amounts. These tanks are delivered to junction railroad stations where their contents are pumped into gasoline carriers and smaller tanks and only then are they shipped over distances of more than 100 kilometers to the various rayons. The grain growers have made many requests to the suppliers, asking them to ship the preparations in smaller packaging. However, they are still being sent in large containers.

The Siberians are also complaining with regard to a shortage of the machines required for applying fertilizer and herbicides. Of 1,200 spraying units in operation at the present time on fields throughout the oblast, more than one half of them were produced using primitive methods in kolkhoz and sovkhoz workshops. In some rayons, even the available spraying units are being employed in an unproductive manner owing to a lack of wheeled tractors.

Certainly, these problems have been around for some time and thought should have been given to them in advance. But the situation must be corrected rapidly. The grain fields of Siberia require special attention.

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## MAJOR CROP PROGRESS AND WEATHER REPORTING

### ASTRAKHAN TECHNOLOGY USED IN BELOGOROD OBLAST

Moscow SELSKAYA ZHIZN in Russian 24 May 86 p 1

[Article by A. Popov, special correspondent: "Using Astrakhan Technology"]

[Text] What is the Belgorod land famous for? Rich deposits of iron ore, large mining-beneficiation complexes and plants. Cities and workers complexes are growing. They must be steadily supplied with fruits, vegetables and potatoes. Gardens in the oblast are providing all these in abundance.

The Razumenskiy Sovkhoz is one of the leading farms in the oblast. Here the harvest of vegetables from each hectare is increasing. Above all, this is because wide use is made of the Astrakhan technology. As is known, it was developed by the All-Union Scientific Research Institute for Irrigated Vegetable and Melon Growing. The technology was first used in Astrakhan Oblast.

Specialists from the Razumenskiy visited Astrakhan and became acquainted with the new work. They then used it themselves, initially on 55 hectares. A high yield of tomatoes was obtained. Now the area has been doubled. In addition to tomatoes, cucumbers are grown by the Astrakhan technology.

Back in the autumn Sovkhoz vegetable growers began to prepare for the growing season. Immediately after the harvest, machinery operators disked the soil and applied herbicides. Then they leveled the fields, applied fertilizers and plowed. In early spring machinery operators cultivated to depths of 10-12 cm and harrowed right after that.

The cutting of guide tracks [shcheli] is a very important operation prior to planting seeds and setting seedlings. This is one of the main elements of the Astrakhan technology. Two tracks 3 cm wide and 30 deep are cut in one pass of a unit. Subsequent units accurately follow these routes.

Sovkhoz engineers have done much to introduce the Astrakhan technology. They installed special devices to prevent bending the frames of cultivators and drills on heavy loamy soils. Now a sizable share of the load is shifted to the tractor's suspension. Guide track cutters were also changed considerably. The innovators welded supports on each of them to give units stability during operations. In addition, the supports work as ridgers. To apply herbicides to

the soil, they have connected sprinkler booms with the needed number of holes to the machines' frame rails. The remaining holes were closed. Hoses have been connected to the open holes. Sprayers were attached to the ends of these hoses and then connected to the shovels.

Operators perform all planting and crop care work with guide track followers attached to drills or cultivators. To repeat, it is these units which make it possible for the units to accurately move between rows.

We note that the new technology has eliminated the need for manual weeding. It is also important to note that the movement of units through the previously cut tracks makes it possible to apply herbicides directly to rows. The results: up to a 70 percent savings in the valuable chemicals.

The Astrakhan technology for vegetable growing is now used at many farms in the oblast -- on more than 1,700 hectares. Local industrial enterprises are giving rural mechanics and machinery operators extensive help. Upon order by the oblast agroprom they have made several hundred machines and attachments.

A. M. Miroshnikov, department chief at the oblagroprom noted: "However, I think it is time that the USSR Ministry of Tractor and Agricultural Machinery Building make equipment for progressive technology."

This is correct. After all, the Astrakhan technology has existed for more than five years and has proven itself well. However, the series production of machinery for it has still not been set up. Mechanics must frequently build items which have been known for a long time.

Belgoroders are using the Astrakhan technology to grow sugar beets, corn and sunflowers. I visited fields at the Novaya Zhizn Kolkhoz in Belgorodskiy Rayon. The farm had completed sugar beet planting. Three units were working here. They were copies of those I saw at the Razumenskiy. The first two prepared the soil for planting while the other one planted the seeds.

This is not the first year that machinery operators at this farm have used the new technology to grow row crops. The results are good. Last year each hectare yielded 371 quintals of beets, compared to a 220 quintal plan.

P. D. Konikov, oblagroprom deputy chairman, explained: "The Astrakhan technology has forced us to take a new approach to training mechanic and machinery operator cadres. For three years now we have been training and certifying them and engineering-technical workers engaged in growing and harvesting vegetables, sugar beets, corn, sunflowers and other row crops."

The Astrakhan technology has received Belgorod farms' approval. It has helped them increase the yields of vegetable and other crops year after year.

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## MAJOR CROP PROGRESS AND WEATHER REPORTING

### BRIEFS

HARVEST PREPARATIONS--Novosibirsk, 13 Jun--This present spring has produced many problems for the oblast's farmers. Despite the complicated weather conditions however, an absolute majority of the farms sowed their grain crops during the best periods. Healthy seedlings have appeared. But, just as in the past, the chief task is that of harvesting the grain crops. The machine operators have made thorough preparations for this work and in good time. The kolkhoz and sovkhoz farmers in Maslyaninskiy, Kochnevskiy rayons have already repaired completely their grain harvesting combines. The machine operators in Novosibirskiy, Toguchinskiy and other rayons throughout the oblast are completing their work of preparing the equipment for harvesting the grain crops. A typical feature of the present season is that of high quality repair work. The workshop workers are competing to ensure that all of the combines and other harvesting machines are adjusted properly and with a guarantee. An effective system of moral and material stimuli is being employed. /by P. Chernov/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 14 Jun 86 p 1/ 7026

HAYING OPERATIONS--Novosibirsk--The peak of the haying season in Siberia has always occurred in July. And in these regions this month as a rule is beset by inclement weather. In addition to rainfall, the work is hindered by the habit of waiting for the grass to grow and acquire bulk. This explains why a considerable amount of low quality hay is procured. This year the decision has been made in Novosibirsk Oblast to terminate this deep-rooted habit. In Dovolenskiy Rayon, for example, mowing operations were started in the middle of June, 2 weeks earlier than usual. Yes and the haying period was revised in other rayons as well. By 7 July, two times more hay had been procured throughout the oblast than was the case by this same date last year. Moreover, one and a half times more haylage and vitamin-grass meal had been placed in storage. For the most part, this was high quality protein-rich feed. Forced ventilation and other artificial drying methods helped to conserve the nutritional value of the feed. Commencing 8 July, a special 10-day period will be devoted to procuring hay, haylage and vitamin-grass meal. The decision has been made to procure 60,000 tons of hay during this period. The tempo of the haying work is being accelerated in Karasukskiy, Krasnozerskiy and many other rayons. On the farms, a special proverb is recalled: work today at maximum capability and hay will be ensured for the winter. /by S. Oparin, chief editor for SOVETSKAYA SIBIR's agricultural section, Novosibirsk/ [Excerpts] Moscow IZVESTIYA in Russian 9 Jul 86 p 1]

MOISTURE CONSERVATION WORK -- Barnaul, 26 Apr--Grain crops are being grown using the intensive technology on more than 1,200,000 hectares in the Altay region

this year -- they occupy mainly fallow fields and furrow slice inversion for perennial grasses. With the arrival of spring, work is being carried out on these fields in connection with the retention of thaw waters. The farm specialists have assigned the task of doing everything possible to ensure that the moisture does not run off the fields into the lowlands, forest and ravines. Instead it must be absorbed into the soil and serve as the foundation for obtaining a high yield. Dozens of units are being operated at the present time on the slopes of hilly land adjoining the Ob River in Kamenskiy Rayon. Overall, thaw water has already been retained on tens of thousands of hectares throughout the rayon, with extensive use being made of moisture-conserving agricultural methods. /by A. Torichko/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 27 Apr 86 p 1/ 7026

SELECTIVE HARROWING--Barnaul, 28 Apr--April is removing the last traces of snow from the fields in the Altay Kray. The land on hundreds of thousands of hectares has already acquired its natural black color. The kray's grain growers have commenced the selective harrowing of perennial grasses, fallow and autumn plowed land for the purpose of retaining moisture. The machine operators in the Kulunda steppe region were the first to commence this work. Dozens of tractors are being moved daily out onto the fields by non-schedule teams in Slavgorodskiy, Mikhaylovskiy, Uglovskiy, Kulundinskiy and other rayons in the kray's western zone. In all, more than 40,000 tractors belonging to 1,634 mechanized sowing complexes will be in operation this year on the spring fields in the Altay region. Special attention will be given to the intensive fields. Spring wheat will be grown on more than 1,200,000 hectares. /by A. Torichko/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 29 Apr 86 p 1/ 7026

FARMING PROBLEMS--A special month devoted to feed procurement work has been established in the Altay Kray. But the green harvest is not unfolding smoothly in all areas. It turns out that the level of equipment readiness is low in some areas. One tenth of the hay has not been procured in Talmenskiy, Togulskiy and Yeltsovskiy rayons. The farmers in the kray's youngest rayon, Shelabolikhinskiy Rayon, have been unable to catch up with their plan. With the knowledge and approval of RAPO /rayon agroindustrial association/ specialists, haylage is being placed in storage thus violating the technology. In essence, grass silage is being procured rather than haylage. Nor are preservatives being employed. They are available in the rayon but they are not being distributed among the farms. Unfortunately, leading technology is still being introduced only weakly in other rayons throughout the kray. /by V. Zhiltsov/ /Excerpts/ /Moscow SOVETSKAYA ROSSIYA in Russian 13 Jul 86 p 1/ 7026

INTENSIVE TECHNOLOGY--Krasnoyarsk, 26 May--(TASS)--Farmers in Krasnoyarsk Kray have commenced sowing grain crops on their second million hectares. The cold spring has advanced somewhat the schedules for the carrying out of field operations and thus the machine operators of all 1,800 complexes are striving to make up for lost time, as they sow more than 20,000 hectares in excess of the plan each day. At the present time, considerable attention is being given throughout the kray to the cultivation of grain crops using the intensive technology. Having taken under contract approximately 600,000 hectares that have been set aside for spring wheat, the Siberians are employing only this progressive method in carrying out their work here. Each field has been supplied with all

of the fertilizers and herbicides required. /Text/ /Moscow SELSKAYA ZHIZN in Russian 27 May 86 p 1/ 7026

INTENSIVE TECHNOLOGY PREPARATIONS--Krasnoyarsk, 11 Feb--More than 660,000 hectares of grain crops will be cultivated using the intensive technology. All of the prerequisites are being created for this to be done. The farms have been provided with the necessary logistical resources and fertilizer and the experience of leaders in this work, particularly the Nazarovskiy and Iskra sovkhozes and the Krasnyy Khleborob Kolkhoz, is being studied. The personnel are undergoing training. The Krasnoyarsk NIISKh /Scientific Research Institute of Agriculture/ conducted a 5-day seminar for the leaders and specialists of RAPO's, kolkhozes and sovkhozes, the pivotal theme of which was the introduction of intensive technologies for the cultivation of grain crops. /Text/ /Moscow SELSKAYA ZHIZN in Russian 12 Feb 86 p 1/ 7026

CSO: 1824/393

## LIVESTOCK FEED PROCUREMENT

### PRAVDA REVIEWS FEED PROCUREMENT PROGRESS

PM311130 Moscow PRAVDA in Russian 24 Jul 86 First Edition p 1

[Ye. Yevgenyev "Agriculture Review": "Grain And Feed"]

The USSR Central Statistical Administration reports that by 21 July the country's kolkhozes and sovkhozes had cut 25.5 million hectares of grain and pulse crops (excluding corn). Some 43.9 million metric tons of hay have been procured, as well as 43.2 million metric tons of haylage and 3.2 million metric tons of grass meal. The heavy rains at the very height of summer have made harvest work difficult. Flexible tactics and skillful handling of equipment are serving the farmers well. Farms in Belorussia, the Volga area, the Central Chernozem and Nonchernozem regions, and the Ruals have joined in the harvest. Kolkhozes and sovkhozes are continuing to tend row crops, till fallow land, and harvest vegetables and fruit.

The meadows continue to be busy places. By the beginning of the last 10-day period of July, farms had laid in 40.6 million metric tons of forage in feed unit terms--3.3 million metric tons more than last year. Farms in Lithuania, Latvia, and Estonia were the first to complete the hay procurement plans, and kolkhozes and sovkhozes in Georgia, Tajikistan, Krasnodar Kray, and Volgograd and Saratov Oblasts were the first to complete the haylage plans.

But overall provision of livestock units with feed is still poor. It is 61 percent in Lithuania; 56 percent in Estonia; 53 percent in Azerbaijan; 51 percent in Latvia; 50 percent in Tajikistan; and 43 percent in Belorussia. Even less forage has been laid in in the remaining republics. Stocks in the RSFSR, for example, are less than one-third of what is needed. Figures indicate that in many areas there has not been a marked change for the better. A considerable proportion of specialists and farm leaders are still giving scant attention to feed.

But, as a rule, farms are successful when they make extensive use of progressive forms of production organization. In V. Chugin's link at the Krasnoqarsk "Novomikhaylovskiy" sovkhoz, 14 people operating a single-job schedule have introduced high-speed cutting techniques and are procuring 1,000 quintals and more of high-protein hay.

In various parts of the country a wealth of experience has been accumulated of procuring feed in any weather conditions. For example, the outlay on the construction of hay barns and sheds is being repaid with interest. In Dnepropetrovsk Oblast, where they have now managed to increase construction of these facilities, they have already laid in twice as much highly nutritious hay as by the same time last year.

Putting into practice the farmers' motto to fight for feed as they would for grain, rural workers in Leningrad Oblast are efficiently carrying out the operations in the meadows even in conditions of continual rain. The machine operators are aided by the all-weather technique of harvesting green material which is in use here. It comprises, in particular, making short bales of sun-dried grass, drying them out using forced-air ventilation, and making extensive use of preservatives.

In short, if feed procurement is well organized and it is handled with skill and commitment everything will operate smoothly. But local checks and statistics have shown that not everyone has adopted the right approach. Sluggishness, unproductive use of hay-harvesting machinery, and organizational omissions have meant that only one-third of the requisite hay and half of the haylage have been laid down in Kostroma Oblast. Things are no better organized in Uzbekistan, Turkmenia, and Kirov and Chelyabinsk Oblasts. The grass is deteriorating in the fields, a great deal of equipment is out of action, and a considerable number of forced-air ventilation machines are not being used.

Haymaking is not proceeding at the requisite rate in West and East Siberia. All the delays and procrastination in the meadows may mean that a considerable amount of the grass will end up being covered by snow again, as happened last season. So will the farms again have to ask the state for assistance and obtain forage from outside? Are the local party and agricultural bodies too kindly disposed toward this practice? Indeed, if you rely on others' stocks you may find yourself in an awkward situation.

Sluggishness during haymaking and violation of techniques not only increase harvest losses but sharply reduce the quality of feed. It is true that farms have begun to pay more attention to the procurement of nutritious forage. The proportion of first-class hay has risen from 58 percent last year to 71 percent this year, and the corresponding rise in the case of haylage is from 53 to 64 percent. But the reserves are still great. A lot of low-quality feed continues to be produced in Kazakhstan, Tajikistan, Moldavia, and Azerbaijan.

The time for large-scale ensiling of corn and other crops is approaching. Just as crucial a time as haymaking. In fact, around 280 million metric tons of silage have to be laid in. But not everyone is properly organized. Whereas in Tataria and Stavropol Kray, for example, nearly all the silage-harvesting combines have been overhauled, one-fifth of the machines are not ready for work on the plantations in Kursk Oblast. Nor are the best corn harvesting times being observed, which means a loss in silage quality.

We know how tremendously important proper forage storage is. But farms are only 76 percent provided with standard facilities for laying down silage and haylage. Some kolkhozes and sovkhozes are still laying material down in unlined earth trenches and pits and even mounds. Agroindustrial committees must pay maximum attention to the construction of standard storage facilities. But most republics have failed to fulfill the half-year plan for the construction of silage and haylage storage facilities.

Grain threshing is now becoming more and more widespread. The assiduous farmer does not leave straw and chaff lying about in the fields. They are promptly gathered up and used to swell livestock units' forage stocks. It is a considerable help, when you consider that one hectare of grain can provide several metric tons of this feed. Nor should one neglect the straw that remains from last year.

As it passes the halfway mark the summer is providing farmers with more and more work to do.

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CSO: 1824/420

## LIVESTOCK FEED PROCUREMENT

### BELORUSSIAN GRASS MEAL, HAY HARVEST PROGRESS MATTER OF CONCERN

#### Party Reviews Problems

Minsk SELSKAYA GAZETA in Russian 25 Jun 86 p 1

[BELTA report: "In the Belorussian Communist Party Central Committee"]

[Text] On 24 June the Central Committee of the Belorussian Communist Party discussed the provision of feed for public animal husbandry and for livestock in the personal possession of citizens for the coming winter.

Reports were presented by directors of the Belorussian SSR Gosagroprom [State Agro-Industrial Complex], secretaries of party obkoms in charge of agricultural matters, first secretaries of a number of gorkoms and raykoms of the Belorussian Communist Party, and chairmen of oblast agro-industrial committees. It was noted that, given the present weather conditions and the current rates at which the first grass harvest is being carried out, the farms will not achieve planned procurement volumes. Additional steps must be taken to obtain the planned stockpiles of feed, ensuring the fulfillment of socialist commitments for the production and sale of livestock products to the state.

The harvesting of perennial grasses must be accelerated for this purpose. This will make it possible to preserve the harvest and to create the conditions necessary for a full second mowing. We need to make arrangements for the timely top-dressing of areas from which the grass has been harvested, with nitrogen and organic fertilizers, to put all unutilized areas, areas around the farms and other arable land into use, and to plant them to feed crops. We need to expand the area planted to after-harvest crops and to use only cover crops for the additional planting of grasses on hay fields and pastures being turned back into meadows. It is important to make maximum use of such sources for supplementing feed supplies as land which has turned into swamps or brushland, forest glades, gullies, roadside strips and other arable, nonagricultural land. We must take full advantage of possibilities for increasing feed production on arable flood land by applying nitrogen fertilizers and harvesting the grass at the right time.

Attention was directed to the need to monitor the quality of the feed particularly closely and use mostly progressive technologies for procuring it, making extensive use of forced-air ventilation, chemical preservers and mixed silage

preparation. It was recommended that not just kolkhoz workers and sovkhoz blue- and white-collar workers, but also pensioners and the entire rural population, be enlisted to take an active part in the feed procurement. Industrial enterprises, organizations and establishments in the cities need to provide the kolkhozes and sovkhozes with more assistance on a sponsorship basis.

#### BeSSR GOSAGROPROM Overview

Minsk SELSKAYA GAZETA in Russian 26 Jun 86 p 1

[Article: "Complete the First Mowing as Rapidly as Possible: A Belorussian SSR Gosagroprom Operational Survey"]

[Excerpts] This year republic kolkhozes and sovkhozes must lay in 3,515,000 tons of feed units from the first mowing. Only 1,693,000 tons, or 48 percent of the planned amount, has actually been procured. The assignment has been fulfilled by 58 percent in Brest Oblast, by 41 in Vitebsk, 36 in Gomel, 48 in Grodno, 51 in Minsk, and 57 percent in Mogilev Oblast.

It is apparent that a difficult situation is developing. Furthermore, many of the farms are obtaining less food from the harvested areas this year. In addition to that, they are dragging out the hay-making. An inspection has shown that the main causes are the harmful practice of waiting for mass to build up, unsatisfactory labor organization and inefficient use of the equipment.

There was completely unjustified delay in Pruzhanskiy Rayon, for example, where a third of the farms began large-scale feed procurement when the early grasses had already blossomed and should have been harvested long before. It was the same situation in Lidskiy and Mstislavskiy rayons, where hundreds of hectares of early grasses were harvested extremely late, in the fully blossomed stage. How could feed quantity and quality be expected, when the Sovetskaya Belorussiya and 50 let VLKSM kolkhozes in Ostrovetskiy Rayon, the Krasnaya Gvardiya Kolkhoz in Volozhinskiy Rayon and the Postavskiy Sovkhoz in Postavskiy Rayon have presently harvested less than a third of the grass.

The feed-harvesting equipment has been poorly prepared and used in a number of rayons and on a number of farms. Technical maintenance teams have not been organized, and a duty schedule has not been set up for the repair brigades.

Many rayons have not taken advantage of the good haying conditions. Only 1,557,000 tons, or 33 percent of the overall plan and 49 percent of the target for the first mowing, has been laid in in the republic. Hay procurement continues to lag greatly in Pinskiy, Stolinskiy, Postavskiy, Ushachskiy, Sharkovshchinskiy, Volozhinskiy, Myadelskiy, Khotimskiy, Shklovskiy and Kostyukovichskiy rayons.

Information on the Harvesting of Grasses and on the Amount and the Quality of Feed Laid in on the Kolkhozes and Sovkhozes as of 23 June 1986

(1) Области	Скошено в плану чайках к первому укоса	Заготовлено сено на в процентах к заданию перво- вого укоса	Заготовлено коровьих едини- ций в процен- тах к заданию первого укоса	Заготовлено (5) кормов на 1 условную голову (без свиней и птицы), центнеров к. ед.		Заготовлено кормов 1 класса (в процентах к проверенным)		
				1985 г.	1986 г.	(7) сено	(8) сеноаж	(9) травяная мука
Брестская (10)	90	48	58	2,96	3,69	82	86	39
Витебская (11)	69	45	41	1,11	2,77	85	79	47
Гомельская (12)	79	44	36	3,43	2,62	88	81	50
Гродненская	84	53	48	2,38	2,90	81	68	78
Минская (13)	80	50	51	3,29	3,73	88	85	54
Могилевская (15)	86	54	57	2,79	4,17	83	76	59

Key:

1. Oblast
2. Amount mowed as percentage of plan for first mowing
3. Amount of hay laid in as percentage of target for first mowing
4. Number of feed units procured as percentage of target for first mowing
5. Amount of feed laid in per standard head (excluding hogs and poultry), quintals per unit
6. Amount of first-class feed laid in (percentage of that tested)
7. Hay
8. Haylage
9. Grass meal
10. Brest
11. Vitebsk
12. Gomel
13. Grodno
14. Minsk
15. Mogilev

The inspection showed that many farms are not using the intensive process for drying the grass and are spending too much time on its preparation. The mowed grass lies 5-7 days in the swathes and windrows on the Druzhba and imeni K. Marks kolkhozes in Kostyukovichskiy Rayon. It is the same situation on a number of farms in Berezovskiy, Stolinskiy, Gantsevichskiy, Postavskiy, Belynichskiy and Mstislavskiy rayons.

The loading of the haylage tower silos is going extremely slowly. The schedule is being met only by Brest and Minsk oblasts. This work has been permitted to just drift along in many places. Only one of the six tower silos is being filled on the Zavety Ilichia Kolkhoz in Stolinskiy Rayon. Even that has taken more than 2 weeks, and the haylage varies in moisture content. All of the 12 tower silos on the Berezhtsy Sovkhoz in the same rayon have been provided with new ZB-50 loaders, but only two have been filled, while alongside them haylage is being laid into trenches. Furthermore, only 8 to 40 tons of grass meal, instead of 200 tons or more, is being received each day as a result of the poorly organized work.

Despite the good weather conditions, the technology for laying in the feed is not being absolutely adhered to everywhere. The mowed grass is frequently not actively turned. Material with a high moisture content is being procured for haylage, and it is hard to tamp down. The drying units are receiving material which has not been dry-cured and is poorly ground. Cases of this have been

found in Postavskiy, Orshanskiy, Berezovskiy, Vitebskiy, Kostyukovichskiy and certain other rayons. This results from a lack of monitoring by the farm specialists and the feed laboratories. Due to a lack of transport and the fact that workers were taken away to perform farm work, the Kostyukovichskiy Feed Laboratory tested only a third of the hay and half of the haylage. The remaining feed is of unknown quality. It is the same situation in Voronovskiy, Postavskiy, Cherikovskiy and Klimovichskiy rayons.

It is very important to increase the effort in the procurement of feed from non-agricultural land. Republic kolkhozes and sovkhozes have basically been provided with the necessary implements. The work is being performed extremely poorly in most of the rayons, however. Industrial enterprises in Baranovichskiy Rayon were given an assignment to obtain 36,000 tons of green mass, for example, but they actually have only 1,103 tons at the present time.

The situation is no better in Kobrinskiy, Bobruyskiy, Pinskiy and other rayons. These facts show that most of the rayons have not established proper intensity for making maximum use of all available resources, and the harvesting of grass from nonagricultural land has practically not been organized, even though there are no other sources for supplementing the forage supply at the present stage.

#### Grass Meal Quality

Minsk SELSKAYA GAZETA in Russian 25 Jun 86 p 1

[Article: "The Stakes are on the Quality of the Grass Meal: An Operational Survey"]

[Text] The "green harvest" is in full swing on republic meadows and hayfields. Grass meal, an extremely important component of balanced feed rations, is being made, along with the procurement of hay, haylage and silage. It accounts for around 40 percent in the local types of balanced rations.

Agreements have been concluded for the grain receiving and processing enterprises to prepare 152,000 tons of grass meal this year. Not an easy task, but last year's experience on a number of kolkhozes, sovkhozes and grain processing enterprises showed that it is perfectly realistic.

Knowing very well the economic benefit from harvesting the grass and preparing the grass meal early, many of the republic's rayons are vigorously engaged in the production of grass meal and its sale to the state. The state silos had received around 20,000 tons of grass meal as of 20 June, for example. Almost half of this was first-class. Farms in Grodno and Minsk oblasts are selling grass meal at a rapid rate. Amounts of grass meal sold by kolkhozes and sovkhozes in Brest Oblast have tripled, compared with the corresponding period of last year. A total of 68 percent of the grass meal coming from farms in Minsk Oblast was granulated. This is grounds for believing that the procurement plans will be fulfilled. It is necessary, however, to strictly see to it that the supplier farms adhere to contractual commitments and schedules, as well as to the principles governing material incentives for the workers employed in feed production.

Unfortunately, this year's situation as a whole is causing justified alarm. A considerable quantity of the grass meal is not being delivered on schedule, in addition to which it is of poor quality. This is true of farms in Vitebsk and Mogilev oblasts. Postavskiy, Belynichskiy and Krichevskiy rayons are particularly behind in their procurement of grass meal for the state. All of the product sold by kolkhozes and sovkhozes in Chausskiy and Cherikovskiy rayons is third-grade.

The Domovitskiy Sovkhoz in Chervenskiy Rayon did not derive the proper conclusions from last year's errors and continues to provide the state with poor-quality grass meal. It is suffering large losses as a result. The farm delivered to the Pukhovichskiy Grain Product Combine six tons which did not meet GOST standards for size or moisture content.

One hundred sacks of grass meal were returned to the Rassvet Kolkhoz in Zhlobinskiy Rayon. It had been ruined in the drying process and had been brought in without accompanying statements of quality. The Iskra Kolkhoz and the Yuzhnoye Association in Pinskiy Rayon deliver grass meal which has not been properly aged.

There are clear cases of mismanagement. Granulated grass meal was leaked on and began to rot on the Zarya Kolkhoz in Kobrinskiy Rayon, for example. At the present time no one has been punished for the spoilage.

It should be pointed out that these shortcomings reflect a large deficiency also on the part of directors of grain receiving and processing enterprises of the Ministry of Grain Products. At the Orsha, Slutsk and a number of other enterprises, warehouses designated for storing grass meal were not repaired in good time, which made it necessary to store the product in the open. Procurers are not visiting all of the kolkhozes and sovkhozes during the meal production period. They do not help to correctly determine its quality and do not arrange for receiving it locally. The suppliers do not always know the rules for delivering the meal by motor transport, for sewing up and labeling the sacks or for filling out the accompanying documents. The grass meal is sometimes returned to the farms because of this.

We need to universally draw a lesson from the events of last year, when fires broke out at the Gorodok and Chashniki grain receiving enterprises and the Mogilev Grain Products Combine due to deviations from the aging periods, the delivery of meal at a high temperature and lack of proper monitoring by the laboratories. Two warehouses and the grass meal stored therein burned as a result. In some cases the quality of the meal procured was incorrectly determined as a result of poorly trained cadres and a lack of the necessary equipment. Workers at the laboratory at the Kormyanskiy Production Section of the Buda-Koshelevo Grain-Receiving Enterprise accepted 368 tons of grass meal as second-grade, but when it was retested, it turned out that only 40 tons were second-grade, and 268 tons were third-grade.

Local agencies of the republic's Ministry of Grain Products and the Agro-Industrial Association must constantly monitor the work of the laboratories and the grass meal shops. The main attention must be given to the quality of the product and to the fulfillment of procurement assignments.

## LIVESTOCK FEED PROCUREMENT

### BELORUSSIAN FEED GRASS AREA PREPARATIONS, STORAGE PROBLEMS VIEWED

#### Meadowland Improvement Needed

Minsk SELSKAYA GAZETA in Russian 18 May 86 p 2

[Article: "Managerial Concern for the Meadow: Summary Evaluation of BSSR Gosagroprom (State Agroindustrial Committee)"]

[Text] With the goal of further increasing the productivity of natural feed lands the republic's enterprises must carry out a large volume of work this year to radically improve haylands and pastures and to convert fields to meadows. The best results are achieved when this work is completed prior to 1 June. This type of schedule is based on the fact that the grasses that are sown during this period utilize spring moisture reserves better, establish themselves well, enable us to produce large harvests of green mass during the year of sowing and are less subject to death during wintering.

Rich experience in developing highly productive haylands and pastures has been gathered in many enterprises of Kletskiy and Nesvizhskiy rayons. It is the good fertilization of the soil and the early completion of meadow work by kolkhozes and sovkhozes that enables them to produce 30-40 quintals of feed units per hectare of meadowland.

Many enterprises began the work to radically improve and turn feed lands into meadows at the same time that they began to sow spring crops and have already completed this work on large areas. Almost half of the planned work to improve haylands and pastures has been completed by the enterprises of Berezovskiy, Gantsevichskiy, Stolinskiy, Vetkovskiy, Kormyanskiy, Svetlogorskiy, Ostrovetskiy, Shchuchinskiy, Dzerzhinskiy, Kopylskiy, Soligorskiy, Bobruyskiy, Goretskiy and Krichevskiy rayons. The kolkhozes and state farms of Maloritskiy, Kalinkovichskiy, Petrikovskiy, Khoynikskiy, Vileyskiy, Minskiy and Smolevichskiy rayons have already completed the radical improvement of meadows.

However, not everywhere is significance attached to the early improvement of feed lands. The enterprises of Verkhnedvinskij, Gorodokskiy, Dubrovenskiy, Sennenskiy, Zhlobinskij, Rechitskiy, Checherskiy, Voronovskiy, Svislochskiy and Smogronskiy rayons have not yet begun sowing grass on haylands and

pastures. In Minsk Oblast grass has not been sown on a single hectare in seven enterprises, and in Mogilev Oblast--in 11 enterprises.

The main reason for the unsatisfactory course of events relating to the radical improvement of meadows in a number of rayons is the extremely poor organization of work to prepare areas for the sowing of grass by the subdivisions of BSSR Minvodkhoz [Ministry of Water Management], Belselkhozkhimiya [Belorussian Agricultural Chemical Association] and Glavpolesyevodstroy [Polesye Main Administration for Hydraulic Engineering Construction]. Thus, Minvodkhoz organizations still have not prepared a single hectare for the sowing grass seed in 18 rayons of Vitebsk Oblast, in 16 rayons of Grodno Oblast and in 12 rayons of Mogilev Oblast. Belselkhozkhimiya has prepared only 162 hectares of the annual quota of 9,000 hectares for seeding in grass. Glavpolesyevodstroy organizations have not really properly begun work to radically improve meadows. This type of situation cannot be tolerated. All measures must be taken to complete assigned tasks on schedule prior to 1 July of this year.

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Course of Preparing Fields and Improving Haylands and Pastures  
in the Republic's Enterprises  
(in percent of goal)

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Oblast	Area prepared for sowing grass by organizations			Implementation of	
	BSSR Minvodkhoz	Glavpolesyevodstroy	Belselkhozkhimiya	Sowing	Resowing
Brest	--	8	6	34	32
Vitebsk	1	--	--	9	8
Gomel	--	0.3	1	27	19
Grodno	4	--	--	16	9
Minsk	5	23	9	21	25
Mogilev	--	5	--	4	6

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Serious lags are also tolerated by many enterprises as concerns the regrassing of haylands and pastures. Not a single oblast is fulfilling its schedule of indicated work. The regrassing of meadows is being carried out especially poorly in Vitebsk, Grodno and Mogilev oblasts, where the quota has been fulfilled by only 6-9 percent. The enterprises of Verkhnedvinskii, Glubokskii, Gorodokskii, Lioznenskiy, Orshanskiy, Rossanskii, Sennenskiy, Ushachskii, Sharkovshchinskii, Shumilinskiy, Krupskii, Lyubanskiy and a number of other rayons have not even begun this work.

It is planned to apply 180 kilograms of active mineral fertilizers and 30-40 tons of organic fertilizer per hectare of land that is being seeded or reseeded with grass. At the same time, according to operations data a hectare of such meadows receives only 148 kilograms of mineral fertilizers in Brest

Oblast, 82 in Vitebsk and 149 in Grodno; and only 5 tons of organic fertilizer in Mogilev Oblast, 6.8 tons in Minsk and 8.6 in Vitebsk Oblast.

The directors and specialists of rayon agroindustrial associations must deal with the existing situation without delay and must demand a strengthening of work on the part of kolkhozes and sovkhozes. Now the most important thing is not to waste time.

#### Vitebsk Oblast

Minsk SELSKAYA GAZETA in Russian 22 May 86 p 1

[Article by L. Kishkovich, director of the Vitebsk PMK [Mobile Mechanized Unit] of Haylage Silos: "Haylage Silos Need a Manager"]

- [Text] \*Complete Preservation of Feed is Achieved
- \*Silos Provide a "Savings" of 15-20 Percent of Haylage in Comparison to Trenches
- \*Problems of Silo Storehouses
- \*Do We Need "Lone-Standing Silos?"
- \*Guarantee of Kilogram Weight Gains and Pood Milk Yields

"The basic thrust should be made in the direction of complete utilization of active production capacities, of the utmost economy in raw materials, materials, fuel and energy and of the use of resource-sparing and waste-free technology," emphasizes the Resolution of the 27th Congress of the CPSU according to the Political Report of the Central Committee to the party. This directive applies fully to the branch of feed production. After all, it is no secret that due to poor-quality forage livestock raising in a number of enterprises has been very costly. It is no accident that such great attention has been directed not just at increasing the production of coarse and succulent feeds but also at the extensive utilization of progressive technologies for procuring and storing them and for improving their structure and quality.

Haylage is the most common type of feed for cattle. The higher its quality, the more feed units, carotene and protein it contains. A kilogram of silo haylage contains no less than 0.30-0.32 feed units and almost the same number of milligrams of carotene.

At the present time the oblast's kolkhozes and sovkhozes have 231 silos at their disposal. These silos are used most effectively from year to year by Kolkhoz imeni Kirov, Pobeda Kolkhoz and Kolkhoz imeni Krasnaya Armiya of Vitebskiy Rayon, Na Strazhe Kolkhoz of Dubrovenskiy Rayon, Adamenki Sovkhoz of Lioznenkiy Rayon and Lovzhanskiy Sovkhoz of Shumilinskiy Rayon. Unfortunately, during last season only 166 silos were utilized for feed procurement in Vitebsk Oblast. If we consider according to the most modest calculations that the use of silos yields an economic effect of 3,000-7,000 rubles per silo it is easy to imagine how much feed we could save if the silos were used to capacity. It would be equivalent to no less than 1 million

rubles! Practice also confirms that under equal conditions the preservation of feed in silos is 15-20 percent greater than in trenches. Even if losses decrease by just 10 percent, in the oblast as a whole this would be equivalent to accumulating an additional 20,000 tons of succulent feeds. I repeat that this would be the result of improved preservation alone.

I feel that this would be an appropriate time to introduce the following example--in that same Lovzhanskiy Sovkhoz of Shumilinskiy Rayon workers managed to stockpile haylage in four silos for wintering. The remainder was stored in trenches. Here is what the director of the sovkhoz, Petr Ivanovich Gorbachik, has to say on this subject:

"When we ran out of trench haylage we started feeding our young bulls with haylage from silos. Average daily weight gain of animals being fattened increased immediately by 200 grams per day per head. In addition, 14 tractor units involved on a daily basis in moving feed from trenches, were freed. They were transferred to other work. Also, the distribution of feed began to be concluded at 3 P.M. whereas with acquisition from trenches people and equipment worked until 10 P.M."

Here are the convincing advantages of silo haylage, based not on theories but on life itself! Similar examples can be cited from Kolkhoz imeni Kirov and Kolkhoz imeni Krasnaya Armiya of Vitebskiy Rayon, Kolkhoz 1 Maya of Lioznenskiy Rayon, Sovkhoz imeni Timiryazev of Glubokskiy Rayon and others.

Then why is it that progressive technology is not respected by the directors of many enterprises?

Undoubtedly there are a number of objective factors which have forced enterprises to forsake waste-free technology. Criticism of the imperfection of designs for the RBV-6 silo unloader and for the RMB-9.15 mass spreader is justified. There is a shortage of highly productive Ye-280 and Ye-281 machines for crushing mass. In the oblast there is still a shortage of highly trained cadres to knowledgeably service silo equipment.

In the final analysis we have arrived at the fact that last year in Vitebsk Oblast the building of silos ceased altogether. An extreme of a different type arose--to load up all of those silos which were available. This also was not dealt with. The obvious disregard for a progressive technology which had proven itself well on numerous occasions was evident.

That is what yesterday was like. Let's look at today. Here we cannot but note that already now it will be possible to solve many problems more successfully. Our industry has finally turned to face its clients and has begun to take their complaints more seriously. The delivery of new loaders of the ZB-50 type for haylage silos is increasing. The productivity of these units has increased to 50 tons of mass per hour, which is very important for accelerating the loading schedule. The only complaint against the plant-procurer is that the strength of the loader's frame must be increased. This is an obvious defect.

Last year the Vilnius Neris Production Association began the serial production of new RRS-F-50-6 unloaders-levelers. The operations experience in Lovzhanskiy Sovkhoz of Shumilinskiy Rayon confirmed the greater productivity and dependability of this equipment during operations. In the oblast we have 27 such units right now, which is doubtless insufficient if we consider our needs as concerns technical reequipping. And still we can sigh with relief. As they say, the ice is beginning to melt.

In contrast to previous RBV-6 unloaders the new modified version is convenient in that the unloader-spreader can change positions by means of a suspension ring and does not depend on the degree to which the haylage mass is level. Turning on the ring, the unloader's conveyors simultaneously cut off the mass at 50 millimeters. Having made the turn, the unloader and ring are automatically lowered to the established depth and the process is repeated.

An old unloader can be replaced with a new one only when the silo is completely empty. I am saying this because we cannot delay the matter of preparing feed-procurement equipment until the start of the "green harvest." As silo storehouses are freed the necessary mechanisms should be operated, installed and regulated.

In general changes for the better are taking place as regards the use of haylage silos. But what should we do with so-called "lone-standing silos?" In places where an adequate herd of cattle exists it would be expedient to build additional silos near the "loners." This necessity is dictated by the following. As a rule, lone silos are used by enterprises discontinuously, and when the silos are not in use highly trained specialists have nothing to do. What happens if there is an accident or if equipment breaks down? Obviously, with the availability of several storehouses technological feeding processes are not violated. While a silo is being repaired the feed from another can be utilized. Unfortunately, until now there has been no economic foundation for the lack of efficiency of building lone-standing haylage storage facilities.

At the present time it is important for engineering cadres of the agroprom [Agroindustrial committee] to focus their efforts on producing high-quality feed and preserving it during the first year of the five-year plan. This is why we must prepare for the feed-production season with an orientation toward making sure that not a single silo remains empty.

With all the previous "pros" and "cons," the attitude toward haylage silos is beginning to change in their favor. Orders have already arrived for the erection of an additional 8 silos in Mayak Kommuny Kolkhoz of Orshanskiy Rayon. This is not without foundation. The enterprise has a complex for the fattening of 10,000 head of cattle. Here practice has confirmed the great advantages of silo haylage. By using such feed the enterprise achieves a delivery weight of 520 kilograms per head and almost 1 kilogram of average daily weight gain.

Thus, life itself suggests the optimal technology. Today we must direct our knowledge, experience and energy at introducing and widely disseminating this technology.

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CSO: 1824/344

## LIVESTOCK FEED PROCUREMENT

### FEED PROCUREMENT SITUATION, VARIOUS REPUBLICS

#### Regional Overview

Moscow PRAVDA in Russian 3 Jul 86 p 1

Article by Yu. Nikolayev: "Without Losing One Hour During the Harvest Operations; Agricultural Review"]

Excerpts The southern steppe region is at the mercy of machines. Quite often a mowing machine is followed by a grain harvesting combine. On the same road, one may encounter machines carrying grain, hay and haylage. The concerns of the farmers increase noticeably during the summer. It was only recently that the Niva and Kolos machines were operated only on fields in the Central Asian and Trans-Caucasus republics and now today they can be found in the Kuban and Stavropol regions, in Rostov, the Crimea and Odessa oblasts and in the North Osetian ASSR.

According to PRAVDA correspondent N. Gladkov, more than a month has passed since the beginning of the harvest work in Uzbekistan and yet not one oblast has completed its work of cutting down the barley and wheat. In Tashkent Oblast, for example, they have threshed less than one half of the areas. Slightly more has been harvested in Samarkand Oblast. In many rayons, no haste is being displayed in carrying out the harvest work either on non-irrigated tracts, where the grain has become "scorched," or on irrigated lands where the yields have turned out to be quite good.

Thus, in Bukhara Oblast grain crops are being grown under irrigation conditions on 5,400 hectares. How much time would be required for harvesting the grain crops from this area if 250 combines were placed at the disposal of the farms? In all probability, only several days. Meanwhile, the harvest is lasting for almost a month and the grain still remains to be harvested on hundreds of hectares. In Dzhizak Oblast, they remain to be harvested on almost 8,000 irrigated hectares.

What is the explanation for this lag in production? First of all -- poor utilization of equipment. Compared to Syr-Darya Oblast, where the average daily output per combine exceeds 10 hectares, Surkhan-Darya Oblast does one half this amount. In Kashka-Darya Oblast, one combine is cutting down slightly more than 5 hectares of grain crops daily.

In Tajikistan, according to PRAVDA correspondent O. Latifi, the brigade headed by T. Yusupov of the Kolkhoz imeni Lenin in Gissarskiy Rayon is leading the harvest competition. The machine operators are operating in two shifts. They are striving to harvest each ear and each cluster of straw. The combines are being followed by tractors which are preparing the soil for the future harvest. Others are following the same procedure. However, efficiency and harmonious operations are not the rule on all of the farms. In Kulyabskiy and Voseyskiy rayons, for example, two thirds of the harvesting equipment is inoperable. The daily output per combine does not exceed 2 hectares. Here the hay making operations are being dragged out over an extended period of time.

During the harvest period, complaints are often registered on the farms regarding a shortage of trucks. Yet a large motor vehicle pool is concentrated at the kolkhozes, sovkhozes and other subunits of agroprom. However, many machines are inoperable and others are being used only in one shift and thereafter they remain idle. Concern is being registered over the fact that many trucks are still awaiting repair work in Kalinin and Kirov oblasts, in the Udmurt ASSR and in Kirghizia.

A check carried out last year has shown that cost accounting operations are being introduced very timidly at many motor vehicle establishments and thus the drivers are not being motivated towards carrying out their work in a highly productive manner or conserving in the use of fuel and spare parts. At times, the percentage of empty truck runs reaches 70 percent, poor use is being made of towing wagons and daily tasks are not being established for the drivers. At motor vehicle establishments in Konyshhevskiy Rayon in Kursk Oblast and Grigoriopolskiy Rayon in the Moldavian SSR, for example, almost two thirds of the machines are being used with defective speedometers or the readings of the speedometers are clearly at odds with the entries being made in the drivers' trip tickets. At a time when the rural areas are experiencing a special need for transport vehicles, a considerable portion of the motor vehicles of the country's agroprom is being diverted for work in other branches of the national economy. Last year, for example, such freight constituted 34 percent of the overall transport volume for Selkhozkhimiya Motor Vehicle Transport.

The same mistakes are being made this summer in many areas. For example, enterprises of the Chimkent Oblast Freight Motor Vehicle Administration were unable to organize grain shipments in the proper manner. Sufficient vehicles have been made available for the kolkhozes and sovkhozes here, but they are not being used in an efficient manner in all areas. In some rayons, only a formal approach is being employed for introducing multiple-trailer and portion methods into operations in connection with removing the grain from combines.

In those rayons where the harvest operations are already in progress, the yields are not justifying the hopes of the grain growers in all areas: the drought conditions "eliminated" a portion of the crop. Nevertheless, a thrifty attitude must be employed with regard to the crops on hand: everything must be harvested down to the last ear and grain and protection must be provided against losses and spoilage. Those who tolerate waste and are indifferent to losses must be dealt with in a very strict manner.

In commencing their harvest operations, some farms are lowering the rates for the "green harvest."

A business-like and highly responsible attitude towards feed procurement operations is being displayed at many kolkhozes and sovkhozes in Azerbaijan and Lithuania, where by the beginning of July 5.5-7.9 quintals of feed units had been placed in storage per standard head of cattle. Their neighbors operate under similar climatic conditions. But here the rates for harvesting grasses and procuring forage are considerably lower on many of the farms. For example, in Latvia and Estonia, 4.7-4.8 quintals of feed units have been laid away for each head of cattle, in Armenia -- 1.8, Georgia -- 3.1, in the Ukraine -- 2.2 and in Kuybyshev and Novgorod oblasts -- 0.9-1.4 quintals of feed units. The reasons for this situation -- sluggishness, poor preparation for work, inefficient use of equipment, poor organization of the work of the feed procurement specialists. The requirement of the times for the local party committees and the leaders of soviet and economic organs and the collectives of enterprises of the agroindustrial complex is that of maintaining strict control over this work and raising sharply the rates for the mowing and harvesting of grasses.

In some areas the work is being held up by hot dry weather, which has also lowered noticeably the productivity of the feed lands. But this situation can be corrected substantially if all of the grass is harvested from unsuitable lands, if the grass along the edges of forests is cut down and if intermediate sowings of forage crops are carried out in a timely manner. During the winter, use will be made of each and every kilogram of feed.

#### Transcaucasus Report

Moscow PRAVDA in Russian 4 Jul 86 p 1

[Unsigned article: "A Search for Solutions"]

Text Haying operations are in progress in the Trans-Caucasus republics. But the rates for this work are still low and in some areas the quality of the feed as well. In this article our correspondents report on the course of the work, the instructive experience and on the reasons for the neglect.

#### Azerbaijan

The cold and at the same time dry spring period delayed the development of the plants and held up the schedules for feed procurements. And this aroused serious concern among the agricultural workers. At meetings of collectives of communists of kolkhozes and sovkhozes, the republic's party aktiv developed measures for ensuring the availability of the required forage supplies for the winter. The forage crop areas were increased by one fifth and the post-harvest and intermediate sowings are being expanded by more than 100,000 hectares.

Feed procurement work is being carried out in all areas and approximately 600 sprinkling units and 140 mobile pumping stations are in operation. Attention is being given throughout the republic to the wild-growing grasses and common reeds. All able-bodied persons are being employed for procuring these materials. Greater assistance is being furnished by patrons.

In Azerbaijan, the task has been assigned of procuring 17 quintals of feed units, not counting grain forage, per standard head of cattle for the wintering period. Post-harvest sowings of corn and fodder beets are being carried out in a number of rayons.

For example, an effort is underway in the dry Divichinskiy Rayon to maintain last year's indicators and to achieve increases in the milk yields and weight increases. Here the 6-month plan for procuring milk and meat was fulfilled ahead of schedule and work is proceeding well in Kubinskiy, Apsheronskiy, Shekinskiy and Khachmasskiy rayons. Recently the procurement of feed was raised to 12 quintals of feed units per standard head of cattle.

In some instances the difficulties clearly revealed the organizational abilities and skills of some individuals and at other times they have revealed those who are shirking in their efforts and showing a lack of concern. A serious lag has developed in haying operations in Akhsuinskiy, Yevlakhskiy, Ismaillinskiy, Kutkashenskiy and some other rayons. The conservation of feed is not being ensured in all areas and a considerable portion of the feed is of low quality. Genuine concern is not being evidenced in some areas for augmenting the forage supplies, nor are the RAPO's /rayon agroindustrial associations/ furnishing true assistance.

#### Georgia

Abundant rainfall has promoted growth in the grasses. But this has delayed the haying rates. Thus nature has confronted the farmers with a type of examination.

How can the required amount of feed be procured within a brief interval of time?

At the present time, a great deal is being accomplished in the interest of increasing the feed supplies and improving their quality. This will make it possible to obtain 15,000 additional tons of plant protein and to reduce the protein shortage considerably. Equipment, transport vehicles and personnel have been made available in order to ensure the operation of the green production line. This includes manual and office workers of industrial enterprises and organizations and students.

Logistical reserves are being employed in a skillful manner on a number of farms. The workers in Akhmetskiy, Signakhskiy, Tsiteltskaroyskiy, Telavskiy and Kwarelskiy rayons are the leaders in the competition. Among those who are dragging out the work are the farms in Khashurskiy, Gurdzaanskiy, Marneulskiy, Tianetskiy and Zugdidskiy rayons.

The agroindustrial associations and the agricultural leaders and specialists do not always organize their work in a skillful manner. Very little attention is being given to the selection of the feed procurement technology, which should conform to the peculiarities of the weather and to the local conditions. A chronic disease has not yet been overcome: references to various types of objective causes. As a result, a considerable pause is developing between the mowing and hay-stacking operations. At times, such measures as forced ventilation and pressing are being ignored. Nor is full use being made of the method of chemical preservation. In addition, proper control is not being exercised over the course of the work or the quality of the feed.

## Armenia

Owing to the weather conditions, the movement of procurement specialists out onto the fields has also been delayed here.

"I cannot recall such caprices of the weather occurring in the past" stated the chief agronomist of the Echmiadzinskiy RAPO S. Bagdasaryan, "Yesterday we had a frost and today -- insufferable heat!"

Weather is weather and work is work. The workers in Echmiadzinskiy Rayon are well aware of this fact. And rather than postponing this important work until later, they are diligently procuring their forage and striving to find reserves in all areas. They have already over-fulfilled the plan for laying in haylage made from alfalfa.

The experience of leading farms in Echmiadzinskiy, Abovyan'skiy, Nairiyskiy and other rayons reveals that procurement operations can be organized well in all areas.

However, the status of affairs on the whole is arousing serious concern. The hay-making rates are still low. The grasses are being harvested slowly and placed in storage with violations of the technology. According to an evaluation by specialists, the haylage prepared at the Sovetakan and Norapat sovkhozes in Oktemberianskiy Rayon and on a farm in the village of Ushakert in Bagramyanskiy Rayon contains a raised moisture content. Thus, of the 4,700 tons of haylage produced in Ararat'skiy Rayon, 20 percent is considered to be of non-standard quality.

And indeed the above-mentioned farms are co-located with Echmiadzinskiy Rayon. From a logical standpoint, they should be the first ones to display an interest in a leading procurement technology. This still has not happened however. Neither the RAPO nor the rayon party committee has urged on the rural leaders in this regard. The same situation prevails in other farming zones throughout the republic. Thus it turns out that some refer to the weather while others work and search for a solution.

The USSR Central Statistical Administration reports: Prior to the beginning of July, the kolkhozes and sovkhozes of Azerbaijan had placed in storage 5.5 quintals of feed units per standard head of cattle, in Georgia -- 3.1 and in Armenia -- 1.8 quintals.

A majority of farms in the Trans-Caucasus republics have tolerated a reduction in the procurements of feed compared to last season. By no means are the kolkhozes and sovkhozes here using their potential and reserves in the same manner. Reports received from all three of the republics have indicated that the weather has not indulged the feed producers. But some have countered the inclement weather with ability, experience and the potential of their technical base, while others have yielded in the face of difficulties.

In particular, the farms in Armenia have fallen behind in carrying out their haying operations. The passive attitude of the agricultural

leaders and specialists and agroindustrial associations and committees and the connivance of party organs -- these then are the causes of this neglect. In short, decisive measures are needed for correcting the situation and for achieving a radical improvement in the intensification of feed production.

#### Commentary on Uzbekistan

Moscow SELSKAYA ZHIZN in Russian 24 Jun 86 p 1

Article by M. Babintsev, Uzbek SSR: "Measures Were Undertaken, But..."

Text Reply by Uzbek SSR Gosagroprom. The Uzbek SSR Gosagroprom, having discussed the article entitled "The Feed Fields -- A Secondary Operation" (8 May issue of SELSKAYA ZHIZN), reports that the article is correct and that it touches upon an urgent and important problem -- feed production in the republic.

Owing to an extreme lack of water this year, feed production is in grave condition. Specialists attached to the Uzbek SSR Gosagroprom and its subunits in the various areas are undertaking all possible measures aimed at obtaining the planned forage crop yields and protecting the stand of perennial grasses.

In light of the decision handed down by the 16th Plenum of the Central Committee of the Communist Party of Uzbekistan, a definite amount of work has been carried out in connection with creating a strong feed base for livestock husbandry. The area of forage crops has been expanded considerably and their actual cropping power raised.

In 1986 the forage crop areas on lands of kolkhozes, sovkhozes and mezhkhozes of the Uzbek SSR increased by 52,500 hectares compared to 1985, with the total amounting to 899,400 hectares, or 22 percent of the republic's overall sowing area. Perennial grasses made 589,900 hectares, or 65.6 percent of the fodder fields.

There are 4,096 feed production brigades in operation on the republic's farms, including 3,027 which operate on a collective contract basis.

Specialists attached to the Uzbek SSR Gosagroprom computed the anticipated requirements and availability of feed for livestock husbandry by oblasts of the republic and they developed measures for ensuring that livestock husbandry will be supplied with full-value and diverse types of feed up to the year 1990.

Kh. Iskanov  
Deputy Chairman of Gosagroprom  
for the Uzbek SSR

## Our Comments

When I visited the feed yard of the Kommunizm Sovkhoz, accompanied by the secretary of the Surkhan-Darya Oblast Party Committee K.B. Babakulov, hay storage operations were in full swing.

"We are procuring 40 quintals of feed units per standard head of cattle" we were informed by the sovkhoz director A. Abdurakhimov, "High quality forage and, it follows, thrifty storage and use of it have made it possible to reduce feed consumption for the production of a unit of product by 15-20 percent compared to the planned figure."

And for Sariasiyskiy Rayon on the whole, in which the Kommunizm Sovkhoz is located, this concern for a high return from a forage field is quite noticeable. Here they have increased the sowings of root crops and the leading farms are obtaining 1,000 quintals of roots per hectare. More vitamin meal and granules are being produced than has been the case in past years and intermediate sowings are being employed on an extensive scale. In short, all possible measures are being undertaken aimed at procuring not less than 100 quintals of feed units from each hectare of irrigated arable land.

The farmers in Angorskiy, Termezskiy, Leninyulskiy and Denauskiy rayons in this southern oblast, where more favorable conditions exist compared to other zones, possess great opportunities for placing high quality feed in storage. But, similar to many areas throughout the republic, the indifference of those leaders and specialists who are overlooking the best periods for harvesting alfalfa is quite alarming. On many plantations, this crop has been standing too long, it has finished blossoming, it is losing its nutritional qualities and still the harvesting units are nowhere to be seen. Almost a week transpires between the mowing and picking up of the grasses on some farms. It comes as no surprise to learn that even in Surkhan-Darya Oblast, where the harvest work commences considerably earlier, the second cutting of alfalfa has still not been completed. Was it not here that the workers of oblagroprom displayed some uncertainty when determining the number of cuttings for the principal forage crop and stated that it was hardly possible to obtain four crops? Yet according to specialist estimates, the last cutting of alfalfa here can furnish 50,000-60,000 tons of hay!

In a number of rayons in this oblast, up to one half of the alfalfa is used for haylage. But the technology for placing it in storage is quite often not observed and large quantities of feed spoil. There is one reason for such management: pursuit of gross results, with a preference being shown for quantity at the expense of quality.

In the face of an acute shortage of feed, the only solution today for many regions of Uzbekistan is that of preserving and raising the quality of the feed. Fine experience in use of the progressive technology for procuring coarse feed has been accumulated for example at the Surkhan-Darya Sotsializm Sovkhoz and at the Kolkhoz imeni 40-Letiya Oktyabrya in Chinazskiy Rayon in Tashkent Oblast. Use is being made here of a method which involves the shade drying of hay under sheds. This makes it possible to preserve a larger portion of the nutrients. A considerable portion of the coarse feed is being stored on metal straddles, thus ensuring natural ventilation. However, the procurement of good coarse

feed has not been organized in all areas. Thus, at the Gornyy and imeni Zhdanov sovkhozes in Dzhizak Oblast, they managed to place hay in stacks which was already suitable for livestock bedding. Apparently no advantage had been gained from the seminars conducted in Dzhizak Oblast on the carrying out of feed production operations.

Somewhat alarming is the fact that a third cutting was not obtained from 400,000 hectares designated in the republic for a second cutting. A lack of water caused many difficulties. In such a situation, special importance is attached to organizing thrifty use of irrigation water. But a check carried out in Navoi, Samarkand and Kashka-Darya oblasts has shown that in the irrigation of cotton and alfalfa plantations, owing to mismanagement and poor operation of the irrigation networks, up to 20-30 percent of the moisture is lost in vain. The leaders of a number of farms in these oblasts, instead of utilizing their reserves for accumulating feed, humbly ask their neighbors for straw and grass from unsuitable lands. The position taken by agroprom in Andizhan Oblast, where all of the conditions are available for raising the return from an irrigated hectare and for shortening the grass harvesting periods, is quite incomprehensible. Here they commenced the second cutting during the second half of June, having lost at least 10 days.

The worthless practice of allowing the feed fields to be the last to receive water and fertilizer continues to be employed on farms in Uzbekistan. Although SELSKAYA ZHIZN has already issued articles on this subject, the situation continues to remain unchanged. It has been further aggravated this summer by a lack of water, with tens of thousands of hectares of alfalfa failing to receive moisture and mineral top dressings. Such an attitude is harmful not only to the livestock husbandry farms but also to the cotton fields, which are becoming scanty since the crop rotation plan in this instance is purely formal in nature.

#### Kazakhstan Progress, Tasks

Alma-Ata KAZAKHSTANSKAYA PRAVDA in Russian 10 Jul 86 pp 1-2

[KazTAG report: "Intensifying the Rates of the Green Harvest"]

[Excerpts] Among the more important concerns of workers attached to the agro-industrial complex, special importance is being attached today to creating a strong feed base for the forthcoming livestock wintering period. The fate of the plans and obligations for both this current year as well as next year is dependent upon the work being performed by the feed procurement specialists.

Based upon the aims of the CPSU Central Committee, the all-round special purpose Korma and Belok programs have been developed and are being implemented in all areas. The structure of the feed fields at sovkhozes and kolkhozes has been re-examined and the areas designated for alfalfa, sainfoin, soybeans, rape and other high protein crops have been increased.

The favorable conditions which prevailed in a majority of the oblasts have created a real opportunity for over-fulfilling the established tasks for procuring feed and for ensuring that feed is made available in adequate quantities for the public livestock husbandry operations of kolkhozes and sovkhozes and also for the livestock being maintained on private plots of the population.

The 3d Plenum of the Central Committee of the Communist Party of Kazakhstan assigned the following task to each rayon and farm -- to satisfy fully its requirements for internally produced feed and for the republic as a whole to have not less than 19 and in the northern oblasts 24-27 quintals of feed units of protein-balanced coarse, succulent and other feed per standard head of cattle. These limits should be viewed as being minimal in nature.

The second week of the month's campaign dedicated to accumulating feed revealed that the rates for the "green harvest" have intensified in many oblasts and rayons and on many farms throughout the republic. As reported by the TsSU /Central Statistical Administration/ for the Kazakh SSR, by 7 July of this year sown and natural grasses had been cut down on an area of 12.4 million hectares, 5,640,000 tons of hay have been placed in storage, or 35 percent of the plan, 1,454,500 tons of haylage or 38 percent of the plan have been laid away and 58,900 tons of grass meal were produced. These figures are considerably greater than those for the same date last year.

The feed procurement specialists in Kustanay Oblast are demonstrating a high degree of organizational ability. Having supported the initiative displayed by agricultural workers in Kokchetav Oblast, all of the equipment here was included in the work commencing with the very first days of the haying operations, the required cultural-domestic conditions were created for the personnel engaged in harvesting the feed and an effective socialist competition was organized among the personnel. All of this made it possible for the oblast's farms to fulfill their 2-week task for procuring hay by 170 and haylage -- by 191 percent. During the last week alone, almost one third of the annual requirement for hay was pressed and stacked. The sovkhozes in Semiozerniy, Taranovskiy and Fedorovskiy rayons have already satisfied their requirements by 65-85 percent.

The 2-week task for accumulating hay and haylage has been over-fulfilled by the sovkhozes and kolkhozes in Karaganda, Turgay, Semipalatinsk oblasts, hay -- by those in Pavlodar, North Kazakhstan, Ural, Guryev and Aktyubinsk and the annual tasks for the laying in of haylage -- in Dzhambul and Chimkent oblasts.

To carry out rapidly the mowing of sown and natural grasses, to obtain adequate quantities of high quality coarse feed and to preserve such feed well -- such is the task which is presently being solved successfully by many of the republic's sovkhozes and kolkhozes. At the same time, there are still many leaders of farms and rayon agroproms who possess parasitical tendencies and who hope to import feed from the side or purchase it from the state. Considerable areas of meadowland have not been mowed in East Kazakhstan, Kzyl-Orda, Dzhezkazgan, Taldy-Kurgan and Chimkent oblasts.

Despite fine support in the form of feed harvesting equipment and human resources, the farms in Semipalatinsk Oblast harvested less grass by an area of 224,000 hectares compared to last year, Tselinograd Oblast -- by 214,000, Chimkent Oblast -- by 102,000 and Kokchetav Oblast -- by 80,000 hectares. A serious lag in production has also been tolerated in a number of other oblasts.

A better grass stand than ever in the past has developed this year in East Kazakhstan Oblast. However, only 19 percent of the hay procurement plan has

been fulfilled and the tasks for two weeks of the month's campaign have not been fulfilled. Insufficient work is being carried out throughout the oblast in connection with raising the quality of the feed, with use being made of the method of forced ventilation. For example, here the plans call for the laying in of slightly more than 2 percent of the hay. It was by no means an accident when, at the Kolkhoz imeni Kalinin in Bolshenarymskiy Rayon, 287 of 447 tons of hay was subjected to laboratory inspection and found to be sub-standard.

The party committees in Kzyl-Orda Oblast still lack a basic evaluation of the disruptions in the tasks for accumulating feed. A check carried out here by Gosagroprom for the Kazakh SSR revealed that after the first cutting of perennial grasses was completed, subsequent tending of the crop was weakly organized. The mowing of grasses on natural feed lands is unfolding only slowly.

The reasons for the lag which has developed in Chimkent Oblast have to do not so much with the complicated weather conditions but rather with the incompetence of the local leaders. Here, under similar conditions, the procurement of feed at co-located rayons and farms is being carried out at different rates.

Some RAPO's rayon agroindustrial associations in Pavlodar Oblast turned out to be unprepared for the "green" harvest. And although 100,000 more tons of hay were procured here than was the case last year, the increase could have been even greater. However, on many farms in Uspenskiy, Irtyshskiy and some other rayons the equipment was laid up owing to an over-expenditure of fuel during the second quarter and the oblast agroindustrial committee was very sluggish in responding to this problem. The situation is being corrected and yet, just as in the past, the tractors and self-propelled units here are still being refueled in a manner which often leads to unproductive idle time.

The examples cited indicate that some party, soviet and agroindustrial organs have still not reorganized in light of the requirements set forth during the 27th Party Congress and the June (1986) Plenum of the CPSU Central Committee and that they are tolerating serious mistakes in the work of ensuring that livestock husbandry is supplied with feed. Time will not wait and each day of delay represents thousands of lost tons of feed. Urgent measures must be taken during this 7-day period aimed at sharply raising the rates for the "green" harvest, the equipment must be used in a manner so as to produce a high return and technological mistakes must be avoided. The work of the feed procurement specialists must be organized in a manner such that they are interested in working productively.

The chief direction to be pursued in organizational work at the present time is that of achieving a high level of quality in all types of feed being procured. This must serve as the basis for the wages paid to feed production workers. The work concerned with creating a reliable forage supply must include participation by the entire able-bodied population, the manual and office workers of enterprises and organizations and the residents of rayon centers and cities.

The task of the party, soviet and agroindustrial organs and the sovkhoz and kolkhoz leaders consists of creating a strong supply of feed for livestock

husbandry on each farm, being fully prepared for the wintering period and, on this basis, raising the productivity of the livestock and increasing the production and procurements of livestock husbandry products.

#### Turkmen Operations Criticized

Moscow SELSKAYA ZHIZN in Russian 16 Jul 86 pp 1-2

Article by special correspondent N. Timchenko, Turkmen SSR: "Per Camel-Thorn's Trees"]

[Excerpts] The work concerned with intensifying feed production and converting it over to a modern scientific-technical basis is being carried out in a weak manner at kolkhozes and sovkhozes in the Turkmen SSR.

Having returned from the Turkmen SSR and its farms, where feed procurement work is in full swing on these hot days of the Central Asian summer, I turned to my old notes concerning my first visit to the republic in the spring of 1970 and to a report published at that time entitled "Intervals On An Alfalfa Field" (SELSKAYA ZHIZN, 13 May 1970) -- concerning unused farm opportunities and the problems associated with creating a strong feed base for them.

And thus, while leafing through the yellowed pages of the old notebook and also the one which I had brought back from my temporary duty trip, I experienced a strange sensation -- it was as though time had stopped. Three five-year plans had elapsed, thousands of cubic kilometers of precious water had flowed through the broad channel of the Kara-Kum Canal and there had been many indicators and problems.

In analyzing and comparing these notes, a conclusion automatically came to mind: feed production and its directly related animal productivity had shown almost no change here over an extended period of time. If, for example, during those already remote years the task had been assigned of achieving milk yields for the cows on the order of 2,500-2,600 kilograms, then today such an indicator would still appear as a goal to dream about: during the 16 years, the average milk yields on the republic's farms have been raised to only 2,287 kilograms. The productivity of beef cattle husbandry increased at the same low rates: the average daily weight increase in cattle during fattening is 425, swine -- 268 grams. And it comes as no surprise to learn that the meat and milk production volumes are by no means satisfying the increasing requirements of the population -- more than 30 percent is being imported from other regions of the country.

The principal cause of the lag in livestock husbandry operations and its low productivity -- a weak feed base. Even more surprising is the fact that the republic's farms, despite complicated climatic conditions, possess unique opportunities for the production of highly valuable feed. Here we have in mind mainly alfalfa and corn, the cultivation prerequisites for which are all available here: an abundance of heat, water, fertilizer, equipment and the country's longest growing season for plants.

I recall the enthusiasm expressed at the time, in the spring of 1970, when the discussions on the cotton growing farms concerned alfalfa and the prospects for

expanding its sowings. True, the discussions had to do with its potential as a wonderful predecessor crop arrangement for a crop which is generally worshipped here -- cotton. Judging by the old notes and the published report, the figures mentioned were on the order of 400,000-500,000 hectares of alfalfa sowings, the majority of which must be included in cotton-alfalfa crop rotation plans. If over the course of a year's time 5, 6 and at times even 7 cuttings are obtained from them and each hectare is capable of furnishing more than 100 quintals of superb hay, in terms of its feed qualities, then...

Alas, nothing of this nature occurred. From 70,000 hectares, these sowings were expanded only to 124,000, while at the same time, in conformity with the requirements of the scientifically sound farming system, their area must today amount to at least 210,000 hectares. In Sakar-Chaginskiy Rayon in Mary Oblast, for example, there are only 730 hectares of alfalfa on 13,000 hectares of irrigated land of the Khauz-Khanskiy Tract and on 11,000 hectares in Turkmen-Kalinskiy Rayon there is not one hectare of grasses. Does this constitute an improvement in the land or an increase in the feed supplies?

A lack of exactingness and the absence of a purposeful program for developing feed production has produced a situation wherein even leading farms, those which undertook the work in an energetic manner, have made no progress or have yielded their former positions.

Nevertheless, the technical potential of feed production has increased immeasurably today throughout the republic as a whole. Compared to the early 1970's, when the farms had slightly more than 300 pick-up balers and for all practical purposes there were no special mowing machines for production line procurements of hay, today the machine operators have 2,344 pick-up balers at their disposal, including highly productive roto-balers and adequate quantities of self-propelled domestic and imported feed harvesting combines and transport and loading equipment. Assuming the efficient use of available equipment, feed can be procured in all areas during the best periods and of the highest quality.

The agricultural workers are called upon to do this by the decisions handed down during the 27th Party Congress and the June Plenum of the CPSU Central Committee. The republic's party, soviet and agricultural organs must undertake all possible measures aimed at crushing the negative traditions of the past and bringing about a radical change in the work aimed at ensuring the availability of feed for livestock husbandry.

Actually, a proper degree of tension was not created this year for harvesting the grasses. It is being carried out slowly at many kolkhozes and sovkhozes and the machines are being used inefficiently. Although the specialists believe that the equipment available at the republic's kolkhozes and sovkhozes makes it possible to carry out one cutting in just 5-6 days, in actual practice this work is lasting from 15 to 20 days, that is, almost the entire inter-cutting period. As a result, the alfalfa is being harvested very late, during the stage of mass blossoming or even during the stage of seed formation, and this is causing considerable feed losses, a reduction in the nutritional value of the feed and a delay in carrying out subsequent cuttings. In the process, the quality of the hay and haylage is being lowered by a factor of two.

And here is a fact which is especially alarming. A large detachment of agricultural and water management specialists and leaders is working within the republic. Nevertheless, feed production operations are being carried out at times in a less than industrious and in many instances in an ignorant (from an agrotechnical and technological standpoint) manner! The farms lack working plans for procuring their grasses, efficient schedules and consistency in harvesting the fields.

One frequently encounters crude violations of the technology and backward means and methods for carrying out the work, all of which require unnecessary expenditures of funds, manual labor and a most valuable factor with regard to feed procurements -- time. And all of this serves to lower the quality of the feed and raise its cost.

And indeed examples can be cited of skillful feed work being done in the republic. Thus, at Gosplemzavod /state breeding plant/ imeni 9 Ashkhabad Komissary, where high indicators were achieved in farming and livestock husbandry, many levers for intensification were placed in operation and an efficient production line for procuring alfalfa hay was organized. All operations, from mowing the grasses to placing the rolls in stacks, are completely mechanized and the personnel possess a good grasp of their work. In the feed yard, the forage and the processing of it is accounted for in a very strict manner. It is unfortunate that the experience of this farm is being disseminated in a very weak manner.

Is it necessary today to mention the need for accelerating feed production operations in the republic if a second cutting has still not been carried out on almost one half of the area occupied by alfalfa? And the degree of falling behind is even greater in such oblasts as Mary and Chardzhou.

Or let us take the procurement of straw for feed purposes. In almost all areas, one can observe how this work is carried out using a pick-up baler direct from shocks left behind on a field by a combine. In the process, the straw is delivered manually to the baling chamber. A question arises: would it not be more economical to operate a combine without a straw collector and for the crop residues to be picked up and pressed from the windrows, with simultaneous loading of the bales into a transport vehicle?

In an attempt to reduce the feed deficit, all of the republic's farms are procuring natural coarse-stalk grasses -- camel's-thorn, common reeds and Russian thistle. Neglect of these resources, the proportion of which annually reaches more than one half of the overall volume of crude feed procurements, is obviously forbidden. In order to raise their return, it is necessary merely to have an efficiently operating processing base. Unfortunately, there are many problems in this area. Quite often, not only the coarse feed but also forage grain are fed to the animals in unprocessed form. All of this leads to a large over-expenditure of feed per unit of product.

It bears mentioning that during the Plenum of the Central Committee of the Communist Party of Turkmenistan, which was held in early July and which discussed the tasks of the republic's party organizations arising from the June Plenum of the CPSU Central Committee, the shortcomings in the matter of

ensuring that livestock husbandry is supplied with full-value feed were sharply criticized. In reports by the 1st secretary of the Central Committee of the Communist Party of Turkmenistan S.A. Niyazov and the secretary for agriculture K. Sakhatmuradov and in speeches delivered by those who participated in the Plenum, serious miscalculations were uncovered in the work of party, soviet and agricultural organs in connection with the creation of a reliable feed base.

The lag in the production of grain is especially intolerable. The grain crop yields do not exceed 20 quintals per hectare and on many farms in Bakhardenkiy, Geok-Tepinskiy, Maryyyskiy, Dostlukskiy and Kerkinskiy rayons they were lower than 15 quintals. The corn grain yields are falling with each passing year. Compared to 1981 when it was 43 quintals per hectare, in 1985 it was only 33 quintals.

In view of the fact that feed production in the republic is being carried out on an extensive basis, it is clear that during the 11th Five-Year Plan the areas used for forage crops increased twice as fast as the yields of coarse and succulent feeds obtained from them. In the structure of the feed crop rotation plan, the proportion of corn grown for silage and fodder root crops is low. The farms are not devoting sufficient attention to repeated post-cutting and post-harvest sowings or to the cultivation of soybeans, rape, perko and other forage crops containing raised quantities of protein.

A lowered degree of exactingness is being imposed upon the personnel of agricultural and water management organs, kolkhozes and sovkhozes with regard to the use of irrigated land and the cultivation on them of rich feed crops. As a result of a violation of the irrigation regime and insufficient fertilizer applications, their yields here amount to only 28 quintals of feed units per hectare -- this is less by a factor of 3-4 than that being obtained at leading farms. And it comes as no surprise to learn that over a period of many years the republic has been procuring coarse and succulent feed at the rate of only 10-11 quintals of feed units per standard head of cattle.

The situation is further aggravated by completely inadequate control over the quality of the feed. As mentioned in a speech delivered during the Plenum by the 1st deputy chairman of the Turkmen SSR Council of Ministers and chairman of the republic's Gosagroprom G.S. Mishchenko, control over the quality of the feed throughout the republic is the responsibility of four stations for the use of chemical processes and 16 veterinary stations in the rayons. This is clearly inadequate, since only 10-12 percent of the feed is subjected to analysis.

The low quality and unsatisfactory storage and use of feed are conditioned by the writing off of feed supposedly for the production of products. Examples have been cited of two and three times more feed being written off per quintal of beef or milk produced than called for in the norms.

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## LIVESTOCK

### UNION REPUBLIC LIVESTOCK PRODUCTION DATA

Moscow PLANOVYE KHOZYAYSTVO in Russian No 6, Jun 86 pp 112-115

[Article, prepared for print by I. Yevdokimenko under "Data From a Statistical Analysis and Survey by the USSR TsSU [Central Statistical Administration] " rubric: "Production of, and Demand for Basic Animal Husbandry Products by Union Republics"]

[Text] Over half of the output of the agricultural industry comes from the animal husbandry sector. The Basic Directions for Economic and Social Development in the USSR for 1986-1990 and the Period up to the Year 2000 call for meat production levels to reach 21 million t (dressed weight) in 1990, with 106-110 million t of milk, and for eggs to reach 80-82 billion units.

In recent years a certain increase has been noticed in the production of the animal husbandry sector's most important products. The data presented in Table 1 attest to this.

Table 1

	1980	1981	1982	1983	1984	1985
Meat (dressed weight)	15.1	15.2	15.4	16.4	17.0	17.1
Milk, million t	90.9	88.9	91.0	96.5	97.9	98.2
Eggs, billions of units	67.9	70.9	72.4	75.1	76.5	77.0
Wool, thousands t	443	460	452	462	465	442

The average yearly volume of gross output for the animal husbandry sector for 1981-1985 in comparison with 1976-1980 amounted to 107 percent.

All of the union republics contributed their fair share in carrying out the tasks of the USSR Food Program. The increase in gross output of the animal husbandry sector for each union republic is given in the data shown in Table 2.

Table 2  
(in comparable 1973 prices, in millions r)

	1980	1981	1982	1983	1984	1985 (billions r)
USSR	67,382	67,467	69,223	73,599	74,597	75.0
RSFSR	34,252	34,152	35,537	37,581	37,819	37.8
UkSSR	14,777	14,773	14,961	16,099	16,408	16.6
BSSR	3,648	3,644	3,838	4,062	4,309	4.5
UzSSR	1,875	1,950	2,036	2,102	2,028	1.9
KaSSR	4,998	5,009	4,828	5,123	5,139	5.0
GSSR	595	621	617	626	649	0.7
AzSSR	692	729	754	795	825	0.9
LiSSR	1,609	1,627	1,669	1,834	1,920	1.9
MSSR	972	930	935	1,067	1,127	1.2
LaSSR	1,121	1,112	1,120	1,221	1,273	1.3
KiSSR	818	842	859	882	918	0.9
TaSSR	436	458	459	477	475	0.5
ArSSR	398	422	434	450	442	0.5
TuSSR	428	448	442	472	444	0.4
ESSR	763	750	734	808	821	0.8

During the recently completed five-year plan period the volume of animal husbandry production showed an increase in each of the union republics. The greatest rates of increase in animal husbandry production were attained in the BSSR, the LiSSR, the MSSR, the AzSSR and the ESSR. The crucial contributions made toward meeting the country's demands in animal husbandry products were made by the kolkhozes, sovkhozes and intereconomic agricultural enterprises, whose 1985 share of the overall production came to about 70 percent of all meat, milk and egg production.

With each year we see a definite increase in the volume of the most important animal husbandry products. These are the products which are most crucial in meeting the demands of industry for raw materials and of the population for nourishment. Thus, meat production for the 11th Five-Year Plan period is incorporated in the data given in Table 3.

Table 3.  
(dressed weight, thousands t)

	1980	1981	1982	1983	1984	1985
USSR	15,073	15,199	15,368	16,449	16,985	17,073
RSFSR	7,427	7,475	7,647	8,287	8,541	8,468
UkSSR	3,500	3,513	3,526	3,677	3,789	3,881
BSSR	857	841	875	932	984	1,027
UzSSR	330	354	377	389	384	361
KaSSR	1,069	1,168	1,103	1,177	1,199	1,175
GSSR	143	148	148	150	158	168
AzSSR	139	147	151	158	162	167
LiSSR	422	410	401	447	493	516
MSSR	275	222	248	268	288	300
LaSSR	284	288	276	304	314	323
KiSSR	159	163	166	170	173	175
TaSSR	95	98	99	102	104	104
ArSSR	96	93	86	100	103	110
TuSSR	81	81	82	87	84	89
ESSR	196	198	173	201	209	209

The most important reason for the improvement in the quality of the meat we obtained is the increased productivity of the animals. On the whole, the average daily weight gain for cattle and hogs for the country in 1985 compared to 1980 shows an increase, respectively, of 3 and 7 percent. Figures for the Belorussian SSR came to 8 and 15 percent, with 9 and 17 percent for the Lithuanian SSR and 44 and 45 percent for the Moldavian SSR.

In the overall meat balance swine and poultry meat production reflected the highest rates of increase. In 1985, in comparison with 1980 swine production for the country as a whole increased by almost 13 percent, at 28 percent for poultry meat, with an aggregate increase in meat production of 13 percent. During this period of years the BSSR produced 22 percent more hogs, with 18 percent more being produced in the LiSSR. The RSFSR produced 32 percent more poultry meat during this period with a UkSSR increase of 19 percent and a 31 percent increase in the KaSSR.

An important augmentative source for the country's food stocks is the 8 percent increase in milk production for 1985 compared to 1980. The change in this indicator for each union republic is shown in Table 4.

Table 4.  
(in thousands t)

	1980	1981	1982	1983	1984	1985
USSR	90,899	88,874	91,044	96,463	97,906	98,164
RSFSR	46,823	45,453	47,403	50,211	50,421	49,988
UkSSR	21,112	20,613	20,598	22,253	22,805	22,943
BSSR	6,105	5,821	6,075	6,300	6,575	6,772
UzSSR	2,266	2,377	2,446	2,533	2,444	2,410
KaSSR	4,597	4,652	4,511	4,582	4,635	4,720
GSSR	642	646	639	647	633	689
AzSSR	796	836	871	900	925	951
LiSSR	2,524	2,493	2,557	2,742	2,892	2,950
MSSR	1,194	1,174	1,096	1,234	1,318	1,401
LaSSR	1,696	1,630	1,649	1,754	1,842	1,900
KiSSR	682	684	694	706	731	760
TaSSR	499	510	516	528	534	542
ArSSR	488	519	550	541	540	545
TuSSR	306	320	323	337	334	338
ESSR	1,169	1,146	1,116	1,195	1,247	1,255

In spite of a slight decrease in the cattle population, milk production increased in all union republics. High rates for the increase in milk production were noted in the LiSSR, the MSSR the LaSSR and other republics.

The main milk producers were the kolkhozes, sovkhozes and the other producing agricultural enterprises, whose 1985 share for the country came to 72 percent of overall milk production. If the rates of increase in all categories of the economy amount to 8 percent, then the increase here comes to 10 percent, and this only by virtue of the stock's increa productivity. The average yearly milk yield per cow in 1985 came to 2,446 kg against 2,229 kg for 1980. In this connection, the average yearly milk yield per cow at our kolkhozes, sovkhozes and other producing agricultural enterprises of the UkSSR increased from 2,291 to 2,603 kg, with a respective increase in the LiSSR from 2,942 to 3,430 kg and from 2,146 to 2,349 kg in the RSFSR.

Eggs underwent an increase in the balance of food stocks. Table 5 shows the increase in egg production by union republic.

In all categories of the economy egg production increased by 13 percent in the period from 1981 to 1985. This increase amounted to 22-42 percent in the ArSSR, the MSSR, the KiSSR the UzSSR, the GSSR, the AzSSR and the TaSSR. This increase was accomplished thanks to the kolkhozes, sovkhozes and other agricultural enterprises.

Table 5.  
(in millions of eggs)

	1980	1981	1982	1983	1984	1985
USSR	67,943	70,855	72,409	75,110	76,482	76,995
RSFSR	39,539	41,275	42,000	43,556	44,159	44,167
UkSSR	14,606	15,252	15,561	16,122	16,387	16,570
BSSR	3,034	3,119	3,241	3,331	3,379	3,400
UzSSR	1,461	1,604	1,727	1,751	1,838	1,911
KaSSR	3,369	3,475	3,484	3,586	3,726	3,766
GSSR	665	665	712	752	783	821
AzSSR	721	772	835	875	926	934
LiSSR	959	980	1,026	1,063	1,091	1,115
MSSR	874	896	943	979	1,012	1,082
LaSSR	730	739	747	823	861	850
KiSSR	416	435	428	461	498	525
TaSSR	322	375	375	397	420	456
ARSSR	467	478	498	547	562	571
TuSSR	248	246	276	311	281	275
ESSR	542	544	556	556	559	552

"An immediate means for supplementing our food stocks," emphasized M. S. Gorbachev at the congress, "is by reducing losses from our fields and farms during harvest, transport, storage and processing. We have quite a lot in reserves here, and an increase in the demand resources can amount to as much as 20 percent, and for some types of products, as much as 30 percent."\*

The elimination of losses as well as other measures for increasing the output of meat, milk, eggs and many other types of products will allow us to fulfill the assignments prescribed in the resolutions of the 27th CPSU Congress.

The measures adopted by the party and the government are beginning to produce definite results. The results of the work of our livestock specialists and the entire agri-industrial complex for the first quarter of 1986 attest to this. The following results for production of livestock breeding products were attained by the country's kolkhozes and sovkhozes for the period from January to March of this year:

	Jan-Mar 1986		
	Jan-Mar 1986	in % by Jan-Mar 1985	
Meat production (sales of cattle and poultry for slaughter at live weight), thousands t	5,087	107	
Including:			
Cattle	3,070	106	
Hogs	1,298	108	
Sheep and goats	95	93	
Poultry	624	113	
Gross milk yield, thousands t	15,458	105	
Average milk yield per cow, kg	532	107	
Large eggs produced, millions of units	14,363	107	
Average egg yield of layers (each)	55	104	

\*Materials of the 27th CPSU Congress. Moscow: Politizdat, 1986 p 31

The growth in production of basic animal husbandry products for each union republic for the first quarter of 1986 is shown in Table 6.

Table 6.  
(in % by Jan-Mar 1985)

	Meat	Milk	Eggs
USSR	107	105	107
RFSFR	106	106	105
UkSSR	108	105	108
BSSR	111	105	105
UzSSR	99.7	109	128
KaSSR	119	109	110
GSSR	111	109	117
AzSSR	112	101	110
LiSSR	100.2	103	115
MSSR	112	106	106
LaSSR	112	102	118
KiSSR	101	108	116
TaSSR	99.3	106	115
ArSSR	111	105	120
TuSSR	113	106	117
ESSR	93	99	106

Meat production in the kolkhozes and sovkhozes of all union republics, except for the UzSSR, the TaSSR and the ESSR for Jan-Mar 1986 increased by 340,000 t compared to the corresponding period for 1985.

In the RFSFR the greatest increase in meat production was achieved in the economies of the Belgorodskaya, Sakhalinskaya, Penzenskaya, Volgogradskaya, Tyumenskaya, Kamchatskaya, Kurganskaya, Omskaya, Kurskaya, Tambovskaya, Vologodskaya and Orlovskaya oblasts, the Buryat, Dagestan and Komi ASSR's and the Stavropol Kray.

The gross milk yield for this period increased by 782,000 t, this increase being brought about by all but the ESSR.

During the period from January to March 1986, the kolkhozes and sovkhozes produced 975 million more eggs than were produced for the same period in 1985. The greatest successes were achieved by the economies of the UzSSR, the ArSSR, the LaSSR, the GSSR, the KiSSR, the TuSSR, the LiSSR and the TaSSR.

The demand for foodstuffs by the population improved (see Table 7).

Table 7.

(per person in one year, kg)	1980	1983	1984	1985
Meat and meat products in meat equivalent (including lard and subproducts by weight)	57.6	59.2	60.7	61.4
Milk and milk products (in milk equivalent).....	314	313	319	323
Eggs.....	239	256	258	260

According to the USSR Food Program the per capita demand for meat and meat products will amount to approximately 70 kg, with the demand for milk and milk products coming to 330-340 kg and eggs at 260-266 units.

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## REGIONAL DEVELOPMENT

### KIRGHIZ AGROPROM CHAIRMAN ON RESTRUCTURING PROCESS

Frunze SOVETSKAYA KIRGIZIYA in Russian 14 Mar 86 p 2

[Interview with P. M. Khodos, by V. Glazev; date and place not specified]

[Text] Documents from the 27th CPSU Congress especially stress that the creation of unified organs for managing the agro-industrial complex is of fundamental importance in solving the country's food problem. In the political report which M. S. Gorbachev, CPSU Central Committee General Secretary, gave to the Congress, there was a clearly specified path for its further development. The task now is for this organizational structure to be strengthened by an effective economic mechanism, space opened up for economic methods of operating and the independence of kolkhozes and sovkhozes and their interest and responsibility for final results significantly expanded. All this is to assure the real and effective integration of agriculture and the sectors linked to it, both in the center and locally. Our correspondent, V. Glazev, turned to P. M. Khodos, first deputy chairman of the Kirghiz SSR Council of Ministers and chairman of the Republic Gosagroprom, with a request to answer a series of questions.

[Question] Petr Mikhaylovich, please tell what the republic's agro-industrial complex represents.

[Answer] Without any exaggeration one can say that this is the largest and most complicated economic complex in our mountainous territory. I will cite a few figures to support this. The value of its fixed productive capital exceeds 4.6 billion rubles, the agro-industrial complex produces 52 percent of gross product, 50 percent of all workers are employed at its enterprises and it produces 40 percent of national income.

The Kirghiz SSR Gosagroprom was created on the basis of former ministries of Agriculture, the Fruit and Vegetable Industry, the Meat and Dairy Industry, the Food Industry, Rural Construction and Goskomselkhoztekhnika. The ministries of Grain Products [khlebproduktov], Land Reclamation and Water Resources, the Fisheries Administration and the State Forestry are also in it

and subordinate to it. It is also important to note that industrial enterprises which are engaged in the production of agricultural machinery and equipment for the processing sectors should also coordinate their work with us.

The republic Gosagroprom Committee includes managers of ministries, departments which are in the agroprom and function in it. Its decisions are obligatory for all kolkhozes, sovkhozes, interfarm associations and combines, as well as enterprises and organizations engaged in processing and storing products, construction, material-technical supply and production servicing to rural areas.

I want to stress that this restructuring was not through the fusion or mechanical combination of all these departments and associations. An essentially new organ of management with new functions was created. It concentrates in the same hands the planning, financing and management of the agro-industrial complex. This management is based upon complete integration, from production and processing to the delivery of finished products, taking into account the suggestions of local organs -- farms, rayons and oblasts.

The goal of restructuring was to broadly intensify production through the acceleration of scientific-technical progress and the more complete use of the economic potential created in the countryside. This required a unified center, which could flexibly and economically manage all elements in the complex. Its creation is a sign of the times. The huge and expensive apparatuses of previous ministries have been reduced and numerous intersectoral and departmental barriers removed.

[Question] The formation of oblast agroprom committees and RAPOs is now in the final stages. What rights will they obtain, and what about kolkhozes and sovkhozes in the new conditions?

[Answer] The management organizational forms which have been worked out also provide for new economic approaches, in which kolkhozes and sovkhozes have an interest in producing more, obtaining higher incomes and conducting operations on self-financing principles. The use of the Leninist idea of a tax in kind opens greater possibilities for the more active use of commodity-money relations. Farm managers' rights are being considerably expanded. At the same time, their responsibilities for plan fulfillment are increased. The major construction financing procedure is simplified.

The following are established: a stable state procurement plan, a system of economically substantiated prices giving incentive to above plan procurements, counter-sales to kolkhozes and sovkhozes without funds organized as an incentive and material resources provided. All these will undoubtedly accelerate agricultural production.

The economic mechanism in the agro-industrial complex will undoubtedly provide conditions for the extensive use of economic methods in its units, significantly expand the independence and initiative of kolkhozes, sovkhozes and other enterprises and create reliable barriers against waste and dependency.

The role and significance of RAPOs are increasing. They should be active, mobile and operational. Their structure is appropriate for this. Their apparatus combines departments such as finance, material-technical supply, equipment operation and others. Each RAPO has great potentials for successfully completing Food Program tasks. However, only entrepreneurial specialists who display initiative and want to work in the new manner can realize them and fill the new form with full blooded, vital content. The basic demands made upon specialists are: competence and a businesslike attitude. They should stand a head higher than kolkhoz and sovkhoz agronomists, zootechnicians and engineers.

RAPOs are behaving correctly when, during planning, in which now only control figures for output sales are assigned, they reject the so-called attained level, and take into account kolkhoz and sovkhoz land, its fertility, material-technical support, labor resources, the amount of livestock, strength of the feed base, and animal housing and storage facilities. I think that, with the help of scientific research institutes, point based systems for evaluating land should be used so that in the future what contribution a farm should make to the country's food stocks can be precisely determined.

[Question] Where does the agroprom apparatus see agricultural production reserves which can be put to use this year?

[Answer] Above all in raising the output-capital ratio. This involves the efficient use of equipment, land, irrigation water, organic and mineral fertilizers. If everything is efficiently put at the service of intensive technology, then yields can be raised considerably. This is how progressive farms in the Kirghiz SSR MIS [machinery experimental station] operate this year. They obtained 53.9 quintals of grain, 142 quintals of perennial grass hay, 23.5 quintals of sugar beet seed per hectare. Many farms in the republic obtain up to 100 quintals of corn per hectare. Incidentally, last year through the use of intensive technology an additional 6 quintals of corn per hectare were harvested in the republic.

Is it possible to use this powerful reserve to increase grain production? Each farm should weigh its possibilities and widely use intensive technology. According to our calculations, by cutting back grain crops on irrigated land kolkhozes and sovkhozes can use intensive technology to grow corn for grain on at least 50,000 hectares and obtain up to 35,000 additional quintals of corn. It is intended to use new methods on an equal area and raise other grain, obtaining a 8 quintal average yield increase from each hectare. Perennial grasses, silage corn and other crops must be grown by intensive technology.

Cropping structure should be well thought out right now. There should be an expansion in soybeans, peas, alfalfa and sainfoin and increases in yields from these crops. Then there will be no complaints about inability to balance protein rations for livestock. Every year the Kolkhoz imeni 21st CPSU Congress in Sokulukskiy Rayon grows high yields of soybeans and now its animal farms have no shortages of plant protein. Animal rations at this farm provide for young cattle daily weight gains of up to 1,200 grams.

As far as vegetable growing is concerned, it is necessary to expand the Astrakhan method for growing tomatoes and cucumbers, thus increasing intensification in this sector.

[Question] At the recent 28th Congress of the Kirghiz Communist Party it was noted that the production and purchase of livestock and poultry in the republic has remained at practically the same level for a number of years. We lag behind national per capita consumption levels for milk, meat, fish, potatoes, vegetables and melons. What is being done to overcome this lagging?

[Answer] Both sovkhozes and kolkhozes are putting emphasis upon the intensification of animal husbandry in order to overcome lagging in animal product output. Favorable conditions for such a turnaround have been created. This winter we stored up enough feed. As a rule, all of it is prepared and supplemented at feed facilities. Most farms have now attained high animal productivity and are observing schedules for meat, milk and egg sales.

The centralized haulage of field and animal farm products is steadily expanding. During the 12th Five-Year Plan it is intended to build and reconstruct feed combines and vegetable and potato storage facilities. The flour milling industry's technical standards will improve. Mixed feed production capacity is expanding, its quality improving and the percentage of grain in it reduced through the use of complete additives. It is planned to widely introduce waste-free technology in the dairy industry so as to use all raw materials.

Great demands are being made upon collectives at processing enterprises. They are obligated to master progressive methods of work making it possible to attain high output levels. There are many reserves here. While for the nation as a whole, 1,546 rubles worth of products are produced from 1 ton of raw material in the meat sector, our figure is 300 rubles less. This situation can no longer be tolerated.

In recent years our poultry meat production has improved somewhat. In the next five-year plan we intend to sharply increase its output, especially that of duck. If the directors and engineering staff at meat combines do not learn how to process and sell high quality commercial types of birds, then we simply will not be able to retain such people at production operations. Fisheries industry managers are far from using their potentials. The public is especially poorly supplied with fish raised in our reservoirs. The task is to use kolkhoz, sovkhoz and other reservoirs for raising fish.

There are no problems in supplying grain products to the public, either in our republic or the country as a whole. There are 126 types of bread and bakery products produced in Kirghizia. However, there are still not enough rye breads, barankas [ring shaped rolls], sukhari [rusks] and other products which are in high demand. Bread and roll quality leaves something to be desired. There is work to be done in this area.

Due to reductions in wine and vodka output, the production and quality of nonalcoholic drinks is increasing. Their output rises five-fold annually. All this will be attained through the reconstruction of wine and vodka

enterprises, which must be reequipped for canning operations and for the production of nonalcoholic drinks and other products from grapes, fruits, berries and grasses.

We are also beginning to search for reserves for economical and rational operations, based upon high production efficiency and self-financing. Cost accounting and collective contracts are a powerful lever here.

[Question] Incidentally, could you say something about how successfully cost accounting and collective contracts are being mastered at agroprom enterprises?

[Answer] This progressive method has already been introduced at 81 percent of agricultural brigades and links. Last year alone units on cost accounting saved resources worth more than 39 million rubles. However, it must be acknowledged that collective contract is not forcing its way everywhere. It is slowly being mastered at industrial enterprises in the republic's Gosagroprom. Last year there were no contracted brigades at enterprises in the former poultry and meat and dairy industries.

This year all enterprises in the processing sectors of the country's agro-industrial complex are converting to the new operating methods and conditions, which have proven themselves well during the experiment being conducted in the country. We too must not cling to yesterday but make this work goal directed and well organized.

Cost accounting and contracting are a complex of measures directed at introducing modern technology and effective forms of labor organization. Their use enhances the responsibility of managers and specialists in all ranks. One cannot simply declare progressive forms of labor organization and payment. Enterprise and sovkhoz directors and kolkhoz chairmen must become involved in their use. References to the low qualifications of economists will not help.

Last year an experiment began to convert a number of farms to integrated [skvozniy] contracts, based upon cost accounting. This proved itself well at the Nizhne-Chuyskiy Sovkhoz and the Druzhba and imeni 21st Party Congress Kolkhozes in Sokulukskiy Rayon. Experience should be studied and all management staff at farms be more skillfully converted to payments dependent upon final results.

One must also ask: should, under contemporary conditions, farm managers who do not comprehend cost accounting and collective contracts be left at their posts?

[Question] Tell us, Petr Mikhaylovich, what goals republic Gosagroprom should reach in the first year of the 12th Five-Year Plan?

[Answer] Like all collectives in the national economy, republic Gosagroprom has assumed high socialist obligations for 1986, the year of the 27th CPSU Congress. I will give only a few figures. Based upon increasingly intensified agricultural production, the introduction of progressive methods (collective contracts and cost accounting), labor productivity in agriculture is to be

increased by 8 percent, compared to a 6.7 percent plan, and production costs are to decrease by 1.5 percent. Crop yields are also to be raised.

Animal raisers also have big goals. In particular, they have resolved to deliver meat combinats cattle weighing, on the average, 355 kg, hogs -- 102 kg and sheep and goats averaging 40 kg. Each cow on forage is to produce 2,850 kg of milk.

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## REGIONAL DEVELOPMENT

### LITHUANIAN GOSAGROPROM CHAIRMAN ON APK RESTRUCTURING

Vilnius KOMMUNIST in Russian Nos 3-4, Mar-Apr 86 pp 184-190

[Interview by Mindaugas Martsalis with Yuozas Bernatavichus, first deputy chairman of the Lithuanian SSR Council of Ministers and chairman of the State Agroindustrial Commission of the Lithuanian SSR: "Working Creatively, Independently and in the New Manner"]

[Text] [Question] In adherence to the strategic directives of the April 1985 Plenum of the CPSU Central Committee concerning the acceleration of social-economic development in the country, including in our republic, the management, planning and financing of the agroindustrial complex is being restructured significantly. What are the essence and goals of this restructuring?

[Answer] After the May 1982 Plenum of the CPSU Central Committee, which adopted the Food Program, a considerable number of measures were implemented that contributed to the acceleration of the development of the agroindustrial complex, to the strengthening of the economy and of the material-technical base of kolkhozes, sovkhozes and processing enterprises and to increasing the productivity of farming and livestock raising. At the same time, we felt that the management structure of the agroindustrial complex was still imperfect, and integration of agriculture with the processing industry and relations between kolkhozes, sovkhozes and organizations that service agriculture--insufficiently flexible due to departmental barriers. The agroindustrial complex was in need of new methods of administration and management. This was carried out at the end of the final year of the 11th Five-Year Plan--a union and republic agroindustrial committees were established, single rayon organs of APK [Agroindustrial Complex] management were created, which, as emphasized by the Political Report of the CPSU Central Committee to the 27th CPSU Congress, are called upon to achieve the real and effective integration of agriculture and branches of industry related to it.

The State Agroindustrial Committee of the Lithuanian SSR is the central organ of state management of the republic's agriculture complex. It bears all of the responsibility for increasing the production of agricultural products and for preserving them, for fulfilling state procurement plans and for increasing the assortment of food products. The committee has been given the corresponding rights and powers as regards all questions of planning, financing and material-technical supply of the agroindustrial complex. In

planning capital investment and material-technical supply we will first and foremost strive to consider the supply of capital in individual rayons and enterprises and the specific conditions within these rayons and enterprises. The decisions of the State Agroindustrial Committee must be fulfilled by all ministries and departments as well as by institutions, associations, enterprises and organizations if these decisions remain within the competency of the committee.

The committee's tasks are as follows:

- to introduce scientifically-based systems of farming and livestock raising and to effectively utilize material-technical, financial and labor resources;
- to improve the territorial structure of the agroindustrial complex and to achieve production specialization and concentration;
- to achieve an equalization of economic conditions of management in kolkhozes, sovkhozes and other enterprises of the agroindustrial complex;
- to implement measures dealing with the social restructuring of the village and to create stable labor collectives in enterprises, building organizations and processing enterprises.

[Question] Tell us briefly about the structure of the agroindustrial committee, please.

[Answer] The State Agroindustrial Committee of the Lithuanian SSR was created on the basis of the ministries of agriculture, the fruit and vegetable industry, the meat and dairy industry, the food industry and agriculture as well as of the State Committee on Production-Technical Supply to Agriculture. It consists of main administrations--on planning and economic development of the agroindustrial complex; on production and processing of farming products; on production and processing of livestock raising products; on the fruit and vegetable industry; on the food industry; on mechanization and electrification; on capital building and renovation; on material-technical supply; on scientific safeguarding of the agroindustrial complex; on cadres; and for the Main State Veterinary Inspectorate (with the rights of the Main Administration).

Subordinate to the Agroindustrial Committee are the Ministry of Grain Products, the Ministry of Reclamation and Water Management, the Ministry of Timber and the Timber Industry, the State Committee on Natural Conservation, the State Committee on the Fishing Industry as well as Litpotrebsoyuz [Lithuanian Union of Consumer Cooperatives] with the retention of the functions and rights foreseen by its statute and the Lithuanian Production Association of the Fishing Industry. Moreover, enterprises for primary flax processing which belonged previously to the Lithuanian SSR Ministry of Light Industry have been transferred to the State Agroindustrial Committee.

With the goal of improving capital building within the agroindustrial complex, of effectively utilizing bases of the building industry and of eliminating parallel links in building, the Republic Cooperative-State Building

Association of Lithuanian SSR Gosagroprom [State Agroindustrial Committee] has been created on the basis of the republic association of Litmezhkolkhozstroy [Lithuanian Interkolkhoz Building Association] and the Ministry of Rural Construction.

This type of structure will enable us to more efficiently deal with the problems associated with the agroindustrial complex and to more flexibly manage all branches of production and processing. Thus, for example, previously the production and processing of livestock products was under the jurisdiction of the ministries of agriculture and of the meat and dairy industries. Today all questions related to livestock raising are within the competency of one administration--the Main Administration on the Production and Processing of Livestock Products.

[Question] It seems that all of this will have a positive effect on the activities of the agroindustrial complex in rayons.

[Answer] Of course. At present the main manager of the agroindustrial complex in the rayon is the Rayon Agroindustrial Association (RAPO). Subordinate to it are the enterprises for the production and processing of agricultural products, for the organization of production-technical supply, for reclamation and others. The rights of RAPO councils as regards the distribution of capital investments and financial and material resources have been expanded considerably. At the same time, their responsibility has increased as well. While utilizing economic factors in management, RAPO directors and specialists are obliged to achieve the extensive introduction of intensive technology in enterprises, and collective contracts and cost accounting in all production links. It is very important to achieve coordinated work among engineering services, material-technical supply, agrochemical services and building organizations. In the hands of the RAPO council are concentrated the centralized funds of the agroindustrial association. Last year these funds equalled over 18 million rubles. I feel that it would be most expedient to utilize these resources for expanding agricultural production--for the building of new objects and for the renovation and modernization of old facilities, for the building of interenterprise air strips and so forth. In some rayons--Alitusskiy, Kaunasskiy, Kayshyadorskii, Trakayskiy and others--things have been arranged in precisely this manner. However, there are rayons in which centralized funds are sometimes utilized for non-priority needs. Those RAPO councils which developed plans for the use of the funds throughout the entire 12th Five-Year Plan acted correctly.

An especially important task of the RAPO council is the regulation of interrelations between the producers of agricultural products and those who process them. In the past many conflicts arose here. It is understandable that for a certain period of time psychological barriers will continue to interfere with work. These barriers must be eliminated. Local party organizations in agricultural enterprises must play an important role in this.

[Question] As emphasized at the 19th Congress of the Lithuanian CP, during the 12th Five-Year Plan it is planned to increase labor productivity by 22 percent in the public sector of agriculture. We will be able to achieve this

goal only by means of accelerated overall mechanization of production processes and by improving the supply and use of equipment. How does the republic's Agroindustrial Committee plan to deal with this question?

[Answer] For 1986 the fixed capital in agricultural equipment (tractors, automobiles, tractor trailers, spare parts) has been distributed among agroindustrial associations in accordance with the methodologies of former ministries. Next year this work will be carried out on the basis of a directive by the Agroindustrial Committee dealing with the system for organizing supply and for distributing and establishing material-technical values. An analysis that we will make together with the corresponding institutes and the Republic Agricultural Computer Center will be taken into consideration.

Efforts are being made to expand the capacities of enterprises which specialize in the repair of agricultural equipment. It is also planned to create a material-technical base in every enterprise for the repair, technical servicing and upkeep of machinery. In 1988 specialized enterprises will be put into operation in Kayshyadoris for the repair of imported equipment and its parts and units.

In order to improve technical supplies of industrial equipment for agricultural production, ministries, departments, associations and enterprises within the republic have been given additional tasks for 1986-1990 as regards the production of spare parts for motor vehicles, agricultural machinery and equipment.

We must significantly improve the quality of repair of agricultural machinery. Here we are depending on communists working in repair sections.

[Question] The Political Report of the Central Committee of the CPSU to the 27th CPSU Congress emphasizes that the main task of the new APK management organs is to "increase scope by means of economic management methods. To significantly expand the independence of kolkhozes and sovkhozes, to increase their interest in the end result." You are a delegate to the 27th CPSU Congress. What can you tell us about this subject?

[Answer] The independence of enterprises and their initiative were often suppressed by petty surveillance and by the planning of production tasks "from above". There were instances of incompetent meddling in the affairs of the enterprise. The party strictly condemned this practice. The Political Report states that today, in accordance with five-year goals for kolkhozes and sovkhozes, it is planned to establish stable plans for product procurement that will remain unchanged. Those items that an enterprise produces above the plan it will be able to utilize according to its own discretion--sell them to the state as a supplement, sell them at market or through cooperative trade, and so forth. Stable volumes of supplies into centralized resources will also be established for republics, and everything that remains over and above this will be left for local supply. The directors of enterprises will be able to deal independently with questions related to the organization and reimbursement of labor. Nevertheless, it should be emphasized here that the responsibility of directors of enterprises is in no way diminished as regards

production intensification. Rayon agroindustrial associations and party organizations must make sure that all enterprises continue to improve labor discipline and order, to increase profitability and to decrease labor expenditures. Of course both wages and bonuses will depend on end results and on growth in labor productivity.

As emphasized in the resolution of the CPSU Central Committee and USSR Council of Ministers, "On Further Improving the Economic Mechanism of Management Within the Country's Agroindustrial Complex," it is very important to orient the directors of enterprises and specialists toward creative work initiative without forgetting responsibility for the results of financial and economic activities and in every enterprise to strive toward developing production by utilizing the enterprise's own resources.

[Question] Will the accounting required of enterprises decrease? It has made the work of directors and specialists very difficult.

[Answer] It is true that too many reports and accounts were required. Now serious work is being carried out to decrease both the number of reports and the number of indicators included in them. It will be strictly forbidden to require reports that are not foreseen in the established order. However, attention to reports will not decrease. Without serious accounts it is impossible to control the course of production or to achieve the protection of socialist property.

[Questions] The first condition for the implementation of the Food Program and for completely supplying the population with food products is the intensification of farming and livestock raising. During the 12th Five-Year Plan we must double the pace of growth of agricultural production. But raising grain, fruit and vegetables is only half the battle. We still must preserve everything we have raised.

[Answer] The necessity to decrease losses during procurement, shipment, storage, processing and sales of agricultural products is emphasized in the resolution of the 19th Congress of the Lithuanian CP. In many enterprises the base for storage of products is truly inadequate. There is a particular shortage of well-ventilated storehouses and storage facilities. Enterprises must concern themselves with building these. During the 12th Five-Year Plan in the republic it is planned to significantly develop the processing industry. Existing canning factories will be renovated and technically reequipped; the storage enterprise in trade organizations will be expanded.

It is planned to expand the procurement of livestock products in enterprises and the shipment of these products using the specialized transportation vehicles of meat and dairy combines. We hope that next year all cattle procured from enterprises will be shipped by vehicles belonging to meat combines. By 1990 all milk should be shipped by means of the combine's means of transportation.

[Question] One of the most important tasks of the agroindustrial complex is that of strengthening the regimen of economy and of decreasing the cost of production, which is still too high. What possibilities exist for this?

[Answer] The possibilities are great. Success depends on the degree to which all types of resources will be utilized economically, on the degree to which losses will be decreased and on how quickly the introduction of progressive technology will take place. It is very important to purposefully expand and modernize the material-technical base of procurement organizations and to increase the production capacities of processing enterprises.

I want to emphasize the following--decreased costs depend to a large extent on economic attitudes in labor collectives themselves and in each individual worker. The development of such attitudes is an important aspect of the work of party, trade union and komsomol organizations.

During the 12th Five-Year Plan we must decrease the cost of production in agriculture by 5-7 percent, and in the food, meat and dairy industries--by 3-5 percent. This is a serious but realistic goal. There is just one condition--in all sections there should be constant consideration of how to make production less costly. But in no case should quality be sacrificed. Everything must be done in order to make sure that quality improves significantly.

[Question] In other words, man and his attitude toward work are the decisive factors?

[Answer] I would like to cite a passage from the Political Report of the CPSU Central Committee to the 27th Party Congress: "Plans will become a reality only under conditions of intensive and efficient labor on the part of each Soviet person, of each individual--no matter what work post he occupies or where he works. What we do ourselves is what we will have and how we will live." Thus, first and foremost we must develop a conscious attitude among people toward their duties and we must struggle more decisively and strictly against violators of the norms of socialist society. Here the role of primary party organizations is important. Less talk and more concrete action--this should be the work principle of party organizations. The example of communists in labor, everyday life and public activities is also important.

The Agroindustrial Committee has before it extensive work to select management cadres for enterprises and other enterprises and organizations of the agroindustrial complex. A large number of directors and senior specialists of enterprises still do not have a higher education, and specialists of the middle link--a secondary specialized education. The number of highly trained tractor and machine operators and livestock farmers is growing slowly. We are placing great tasks before the Republic Higher School of Management of the Agroindustrial Complex, the Lithuanian Agricultural Academy and the Lithuanian Veterinary Academy, particularly before their departments for the upgrading of training.

[Question] Socialist competition plays a special role in educating farmers in conscientiousness, resourcefulness and a feeling of indebtedness. How will competition be improved?

[Answer] The significance of socialist competition in improving the quality of work, in decreasing losses and in fulfilling the indicated tasks is great and, it could be said, immeasureable. In the course of competition the most industrious and skillful workers, komsomol-youth collectives, brigades, links, farms and other production subdivisions are discovered. However, a great deal still remains to be done in improving competition. As noted at the 27th CPSU Congress and the 19th Congress of the Lithuanian CP, we still come across so-called "strains"; sometimes undeserved bonuses are paid out. The improvement of the organization of socialist competition requires radical changes within the economic mechanism of the agroindustrial complex. At the present time socialist competition is called upon to contribute to eliminating departmental barriers between individual branches and collectives, to the systematic increase in the volume of production of high-quality agricultural products with minimal labor and material expenditures, to improving the quality and productivity of farming and to improving solutions to social questions.

[Question] The correct solution to social questions stimulates the production activeness of people to a large degree. What will be done to improve the conditions of work and life for the village population?

[Answer] In September 1985 the Central Committee of the Lithuanian CP and the Lithuanian SSR Council of Ministers adopted a program of building objects with a social and cultural-domestic purpose in rural settlements, of residential building in the village and of the beautification of settlements during 1986-1990. In accordance with the adopted documents, it is planned as a priority to expand individual and cooperative residential building. More single-family houses with all the amenities and enterprise structures are being built. In 1986 alone 188,200 square meters of total living area will be put into operation in the republic's rural areas. During the 12th Five-Year Plan more attention will be paid to the development of municipal services--water lines, sewer lines and roads will be built at the same time that housing is being erected.

The trade network and consumer services will expand significantly. A cafeteria and a kindergarten-nursery will be built in every enterprise. Already this year it is planned to build 10 village houses of culture. The base of health-protection institutions as well as the sports and tourist base and the possibilities for technical creativity will be strengthened and expanded. All of this reflects the concerns of our communist party about the life of the farmer and about the satisfaction of his domestic and cultural needs. It should be added that the number of young people in the village increases as the income of farmers grows consistently and as work and living conditions improve, which is very important for the future.

[Question] Ancillary production is of great significance for improving the demographic situation in the village and for retaining youth. In our republic the spectrum of ancillary production is fairly broad; in many enterprises it is not related to the processing of agricultural production. What is your opinion on this?

[Answer] Ancillary production and various trades have an effect not only on the demographic situation but on the economy of the enterprise as well. Last

year ancillary enterprises were developed by 140 enterprises. Products worth 65 million rubles were produced and sold. Over 5,000 workers, including 70 percent of women, were involved in trades. Every person involved in ancillary production worked more than 45 days in basic agricultural production. This is a big help to enterprises during the peak season. In the future the ancillary enterprise will continue to expand; it will be developed in most enterprises. We will strive to utilize it more fully for the processing of agricultural products. Moreover, local raw materials and industrial wastes can be used to produce building materials and other widely-used consumer goods to fulfill the needs of the village. At the same time we will provide incentives for production-cooperative ties between enterprises and industrial enterprises and for trade, supply and other organizations. We should not be frightened by the broad spectrum of ancillary production. After all, it contributes to the stabilization of cadres in the village, and first and foremost--of women and young people.

[Question] In the reorganization of the work of the agroindustrial complex a large role is attributed to science. We have already achieved a great deal as concerns the introduction of scientifically-based systems of farming. What are the prospects for and new tasks in this area?

[Answer] At the present time the Agroindustrial Committee has five agricultural scientific-research institutes, two affiliates of the Institute of Farming and several experimental stations. Six hundred six scientific workers work there; of these, 14 are doctors of science and 337--candidates of science. This is a large detachments of specialists with a higher education. The systems of farming and livestock raising worked out by scientists enable us to produce large harvests of agricultural crops and to increase the productivity of livestock.

The introduction of scientific-technical progress in agricultural production places new and extensive tasks before scientists. During the 12th Five-Year Plan it is planned to develop 25 new varieties of grains, potatoes, perennial grasses and other agricultural crops and to develop several lines and types of livestock. Scientific-production associations which include scientific institutions, experimental enterprises and several other organizations are being created, achieving the uninterrupted process of "scientific research--production."

We will demand more serious concern about the introduction of scientific recommendations into production from directors and specialists. Support-demonstration enterprises will be called upon to play a special role here.

All workers of the agroindustrial complex are full of decisiveness to work creatively, independently and in the new manner, to successfully carry out tasks presented by the 27th CPSU Congress. Spring sowing, which is beginning,

is an important test for all of us. Sowing operations must be carried out in the shortest possible time while adhering strictly to all technological demands. With this we will lay a firm foundation for high end results in agricultural production during the first year of the 12th Five-Year Plan.

[Question] Thank you for the interview.

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## AGRO-ECONOMICS AND ORGANIZATION

### USSR GOSPLAN OFFICIALS EXPLAIN CHANGES IN APK MANAGEMENT

#### Local Food Resource Use

Moscow SELSKAYA ZHIZN in Russian 3 Jun 86 p 2

[Article by N. Borchenko, Chief, USSR Gosplan Department of Agriculture and Procurements]

[Text] The transition to new methods of managing and operating at APK is a very important component of the Party's contemporary agrarian policy. Begun at the start of the 11th Five-Year Plan, this process is now at its most important stage. Unified management organs have been created at the center and at local sites. The CPSU Central Committee and USSR Council of Ministers' Decree "On Further Improvements in the Economic Mechanism for Operations in the Country's Agro-industrial Complex" provides the organizational restructuring with powerful economic means for influencing production and social processes. All conditions have now been created for a basic improvement in rural operations. The course's acceleration is assisted by the new procedure for planning, financing and material incentives for agricultural producers. There is a considerable expansion in kolkhoz and sovkhoz independence and their responsibility for final results. There are sharp increases in local soviet and economic organs' demand to supply the public with foodstuffs. There are also increases in their rights in solving these tasks. Great scope for initiative and enterprise is opened by the new principles for the organization of capital construction, the activities of consumer cooperatives and private subsidiary plots. The present operating situation requires fundamental changes in APK leadership style and methods. Materials which this newspaper is starting to publish under the rubric "Economic Discussions" have the goal of helping rural cadre in mastering modern forms of operating. The first discussion's theme is the use of local resources to supply the population with foodstuffs.

In a discussion with me, a well known kolkhoz chairman noted that in recent years several managers have started looking for grain, mixed feed and foodstuffs where they do not grow -- in the cities. One cannot but agree with this conclusion. What enviable persistence is displayed at times to obtain, from state reserves, an extra ton of grain or mixed feeds and to request additional local supplies of meat, oil, produce and potatoes! Unfortunately, the same dependent attitude is seen in some parts of the rural population. One can, and does, see onions, garlic, cabbage, eggs, meat, milk and even potatoes brought into the countryside.

This practice is, of course, intolerable and is condemned by our party and people. A program has been worked out and introduced to increase the country's level of self-sufficiency in foodstuffs, above all through the thorough use of its own potentials.

Party, soviet and operating organs in republics, krays and oblasts now bear full responsibility for reliably supplying the public with foodstuffs, above all through increasing local production. This part of the USSR Food Program has been developed in the CPSU Central Committee and USSR Council of Ministers Decree "On Further Improvements in the Economic Mechanism for Operations in the Country's Agro-industrial Complex".

As was stressed in the Political Report of the CPSU Central Committee to the 27th Congress, the basis of this is to open space for economic methods of operating. It considerably expands kolkhoz and sovkhoz independence and increases their interest in and responsibility for final results. Essentially, this involves the creative application of the Leninist idea of a tax in kind to contemporary conditions.

What specific measures are provided for by this document?

To begin, the Councils of Ministers of Union Republics, soviet organs in krays and oblasts have been given the right to plan the procurement volumes of products and crops used mainly for local consumption. They are given firm five-year plan volumes for delivering the following to all-union and republic funds: livestock, poultry, milk, eggs, potatoes, vegetables, melons, fruit, berries, table grapes, citrus and dried fruits. After meeting obligations to the country and union republics, the residual supplies of meat, milk and other products all remain at the disposal of local organs. They can be used to improve the supplies to the local population, for commercial exchange operations, and to increase processing, carry-over and storage volumes.

This is one of the facets of the Leninist idea of a tax in kind.

Obviously, the transfer of rights "from above to below" concurrently assumes the transfer of responsibility for improving the population's food supplies. It is therefore no accident that in the 12th Five-Year Plan republics which obtain state subsidies must somewhat reduce their meat, meat product, milk and dairy product deliveries compared to the 1986 plan. These measures should prompt agro-industrial committees to more actively seek and find local food supply reserves. At the same time there are fundamental improvements in republic, kray and oblast responsibility for fulfilling plans to deliver products

to all-union and republic funds. Shortfalls must be compensated for in the next quarter or year.

High growth rates in public production operations are intended in the 12th Five-Year Plan. This is the main direction for solving the food problem. It is intended to have above average increases in the production of meat, milk, eggs, potatoes in republics obtaining these products from all-union funds.

Soviet and operational organs now have a powerful tool for influencing local foodstuffs stocks: granting kolkhozes and sovkhozes the right to sell, through consumer cooperatives or the market, up to 30 percent of the planned production of potatoes, vegetables, melons, fruit, berries and table grapes and all of their above-plan production. Importantly, this output is counted toward plan fulfillment. Conditions should be created for kolkhozes and sovkhozes to make maximum use of their potentials. There are broad prospects for actively effecting market prices, considerably improving product quality and increasing farms' money incomes.

It should be kept in mind that during the 12th Five-Year Plan grain purchases will be stable for all years and remain at the 1986 plan level. This means that the entire growth in gross grain harvests can be directed for animal feed needs. This enhances farms' interest in increasing the production of grain, and, on this basis, animal products.

Of considerable importance is the granting of union republic Councils of Ministers the right to change -- within limits of general payments per planned unit of volume -- the purchase prices for various types of products. This makes it possible to use prices to stimulate the production of goods in increased demand.

Gosagroproms of union and autonomous republics and agro-industrial committees can now set retail prices for vegetables, fruits, grapes, potatoes, melons and green crops and other perishable produce sold through stores subordinate to them. At the same time they can also set incentive prices for new types of foodstuffs: juices, fruit drinks, jam, confitures and canned goods.

There are provisions for large scale measure to naturally stimulate growth in the production and sales to the state of sunflowers, sugar beets, their cakes, meals, syrups, and pulps, as well as other types of products -- grain feeds and mixed feeds -- upon the decision of union republic Councils of Ministers and within the limits of funds allocated. All above plan output of feed yeasts, meat-bone meal, whole milk substitutes and other high protein feeds remain completely within the oblast, kray, autonomous or union republic.

In order to improve the linkage of animal product output to mixed feed assortments and to improve quality, starting in 1987 union republics, taking into account the suggestions of local and operational organs -- will themselves determine production assortment and volumes. It is important here to utilize local resources of grain feeds, protein and other feeds.

Private subsidiary operations are an important reserve for supplementing local resources. Starting in 1987 their development will be planned as a component

part of public agricultural production. In other words, the promfinplan [Production-financial plan] of a kolkhoz or sovkhoz will make provisions for supplying the population with feeds, young livestock and poultry, seeds, veterinary, zootechnical and agrochemical services and assistance in tilling plots and in transporting products.

Farms and local organs are now more interested in such efforts. This is why since 1986 livestock and poultry obtained from private subsidiary operations are supplied mainly to local customers. Equally important, all products produced and purchased on farm territory are counted towards fulfillment of kolkhoz and sovkhoz plans and will be paid markups for levels exceeding those in the 11th Five-Year Plan.

One other circumstance must be kept in mind. Up to 20 percent of total meat purchased by cooperatives is to be sold at higher prices to those republics, krays and oblasts which receive state meat subsidies.

Subsidiary agricultural operations at industrial enterprises have sizable reserves for increasing food stocks.

Collective gardening and orchard work are substantial sources for additional production of fruit, potatoes, vegetables and berries and for workers' active leisure.

These and many other reserves for increasing food production are well known. The task is for them to be actively enlisted in solving questions in the fundamental improvement of the population's food supplies.

#### Feed Procurement Responsibility

Moscow SELSKAYA ZHIZN in Russian 8 Jun 86 p 2

[Article by G. Yelistratov, deputy chief, USSR Gosplan Department of Agriculture and Procurement]

[Text] We continue with the publication of materials on questions concerning the implementation of the CPSU Central Committee and USSR Council of Ministers Decree "On Further Improvements in the Economic Mechanism for Operations in the Country's Agro-Industrial Complex". The previous discussion was published on 3 June. Today's material involves improvements in the use of feed grains.

In the first discussion the main attention was concentrated on questions in improving the population's food supplies through the maximum use of local resources and the potentials of republics, krays, oblasts and rayons. Today the discussion is how the new economic mechanism for operations can promote the development of feed production, improve feed preparation and increase animal husbandry productivity.

It cannot be said that feed production is standing still. Last year the average annual consumption of feed resources increased by 5 percent over the

pervious five-year plan, the procurement of feeds of plant origin increased by 14 percent. At the same time there are very great reserves for improvements in this sphere.

Concentrated feeds account for about a third of total feed consumption. Their highly efficient use is an especially important task.

Above all, this involves the qualitative sides of the matter. For example, in 1985 each ton of grain used in producing mixed feeds at state enterprises yielded almost 30 percent less protein than in 1975. In the final result this leads to the overconsumption of feed per quintal of meat, milk and eggs.

A quite paradoxical situation has arisen: although there is a shortage of feed grains, a sizable share of them are fed in unprocessed form, while the capacity, especially that built on an interfarm basis, is not utilized. The quality of mixed feeds produced at state enterprises is not improved. Plans for the use of supplied [davalcheskiy] grain for mixed feed are not fulfilled. Many kolkhozes, sovkhozes and agro-industrial associations do not try to increase the production of protein sources. There is a growing stream of requests to deliver protein feeds from state resources.

The CPSU Central Committee and USSR Council of Ministers Decree "On Further Improvements in the Economic Mechanism for Operations in the Country's Agro-Industrial Complex" makes fundamentally new approaches to the rational use of feed grain. Complete responsibility for supplying animal husbandry with high quality, balanced concentrated feeds and for their rational use is now entrusted to the Councils of Ministers and Gosagroproms of union and autonomous republic, to soviet organs and agro-industrial committees in krays and oblasts.

Ways of solving this task have been determined.

Beginning in 1987 the economic and social development plans for union republic Councils of Ministers will specify the volumes of feed grains and protein sources allocated from state resources. Recall that previously the amount of finished mixed feeds and protein-vitamin additives was specified. Union republic Councils of Ministers must now compile plans for mixed feed production and assortment, widely using local grain and protein resources and production capacity. This will prompt them to steadily increase the production of grain and all possible sources of protein. This applies not only to kolkhozes and sovkhozes, but to industrial enterprises in a given oblast, kray or republic, independently of their departmental subordination. Only insignificant shares of fungible raw materials (sunflower cake and meal, fish and meat-bone meal) arriving after being processed by industries will be centralized for subsequent redistribution. It is also essential to minimize the interrepublic transportation of protein raw materials.

Because the centralized funds will mainly receive sunflower cake and meal, the decree specifies new measures for increasing kolkhoz and sovkhoz interest in greater sunflower production. For example, for every quintal increase in Pervenets variety seed sold, the counter sales of 40 kilograms of meal (cake) and 20 kg of mixed feeds have been established, while for every quintal of

other varieties the figures are 10 kg of meal (cake) and 20 kg of mixed feeds. For the sales of each quintal of sunflowers above the average level attained in the 11th Five-Year Plan it has been decided to sell 30 kg of meal (cake) and 20 kg of mixed feeds. Similar measures have been introduced to give incentive for sales of soybeans and sugar beets to the state. Previously existing incentives procedures for producing mixed feeds from seeds of various crops hauled in from outside a union republic have been retained. In order to stimulate the purchase of other types of agricultural products, union republic Councils of Ministers have been given the right to introduce the counter sales of mixed feeds from their stocks.

The payment of up to 50 percent markups over purchase prices for kolkhoz and sovkhoz sales of sunflowers, sugar beets, raw cotton, soybeans and a number of other crops to the state in amounts above the average level has been extended up until 1978-1990.

This involves a significant expansion in the rights of union republics and local organs. The center of gravity in solving disputed questions has been shifted to where they should be solved. The decree specifies that independently of the departmental subordination of an enterprise in a given oblast, the feed yeasts, meat-bone meal, whole milk substitutes and other industrially produced high protein additives it produces over the plan remain completely at the disposal of oblast and kray organs, autonomous and union republics (not having oblasts). These measures should stimulate the work of local organs and direct the efforts of all to the search for additional local reserves.

Exceptions to the general rule are allowed in those cases where the overfulfillment of plans for the production of high protein feeds is linked to enterprise raw material supplies brought in from outside. Depending upon local organs' contribution, they may keep at their disposal not all, but only part of the above plan output. There are also specific rules for fish meal production.

Thus, the decree specifies an entire complex of measures directed towards considerable improvements in the situation. By the end of the 12th Five-Year Plan joint efforts must assure the needed supplies of completely balanced feeds used in animal husbandry.

The USSR Ministry of Grain Products and its local organs are given an important role in this matter. They are responsible for implementing a unified technological policy in the mixed feed industry, the delivery of appropriate resources provided for in the centralized distribution plan, and for producing the planned volumes of mixed feeds.

The 12th Five-Year Plan's stable annual plans for grain purchases at the 1986 level are of great significance. Farms and agro-industrial committees are confident that by increasing production and fulfilling grain purchase plans they have the right to dispose of the grain remaining: either sell it at advantageous above-plan conditions clearly specified in the decree or use it for other purposes, above all for animal feed.

At the same time there are sanctions for the nonfulfillment of grain purchase plans if this does not involve natural calamities. In such cases there will be corresponding reductions in the allocation of feed grains or mixed feeds from state reserves.

The new economic mechanism creates a solid basis for discovering and using all reserves for increasing the production of grain and protein raw materials. It also makes possible creativity and initiative and simultaneously increases responsibility for the work done, its direction in the proper channels and is based upon real possibilities and experience at progressive farms.

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## AGRO-ECONOMICS AND ORGANIZATION

### GOSAGROPROM OFFICIAL ON NEED TO BROADEN COST ACCOUNTING USE

Moscow SELSKAYA ZHIZN in Russian 24 Jun 86 p 1

[Article by A. Chursin, deputy chief of the Administration of Consolidated Planning and Economic Analysis of the USSR State Agro-industrial Committee, under "Economic Discussions" rubric: "Toward Genuine Cost Accounting"]

[Text] The newspaper is continuing a discussion on economic levers for production management. The preceding discussions were published on 3 and 8 June. The subject of today's material is intensification of cost accounting bases in the work of kolkhozes and sovkhozes.

Genuine cost accounting, the relation of enterprises' incomes to the end results, should become the norm for all units of the agro-industrial complex. The resolution of this important problem formulated at the 27th Party Congress was placed on a firm footing after publication of the decree of the CPSU Central Committee and the USSR Council of Ministers "On a Further Improvement in the Economic Mechanism of Management in the Country's Agro-industrial Complex." It determined measures to heighten the effectiveness of centralized management of the economic system, decisively extended the boundaries of independence for enterprises, increased their responsibility for management efficiency and took into account errors in managing the rural economy.

In the past, poor interaction of cost accounting and economic responsibility, for example, has led kolkhozes and sovkhozes in the Uzbek SSR to inefficient use of available resources and a rise in wages with a reduction in labor productivity. In the past five-year period, production cost here rose 29 percent. As a result of the fact that the favorable economic conditions created by the May (1982) Plenum of the CPSU Central Committee were not supported by effective methods of management from below, it was not possible to eliminate the unprofitability of production of certain types of goods in a number of regions in the country. Grain, sugar beets and milk are being produced at a loss at every fifth farm, and vegetables, beef cattle and wool--at every other kolkhoz and sovkhoz. This must be mentioned today in order to emphasize once again: the use of economic levers does not tolerate formalism.

Efficiency and enterprise in cost accounting must replace paperwork. The experience of many leading collectives attests convincingly to this. For example, sectorial cost accounting, mastered at the Kolkhoz imeni Kalinin in Berdyanskiy Rayon, Zaporozhye Oblast, made it possible to obtain 10-12 percent more output from a hectare and to raise labor productivity 30-40 percent. Establishing a direct relation between the wages of the kolkhoz workers and the production volumes and material input helped the Za Mir Kolkhoz in Shalchininskii Rayon in the Lithuanian SSR, the very first year it was introduced, to increase the gross product by 11 percent and to reduce its production cost by 4 percent. At the Stepnoy Sovkhoz in Sarpinskii Rayon in the Kalmyk ASSR, by intensifying input monitoring, over 100,000 rubles worth of intrafarm "money" was put into circulation, with the aid of which brigades, farms and other subdivisions are paying for the use of equipment, stock, fodder and other resources. Their use taught many to take into account saving and overexpenditure of resources and ensured that cost accounting was brought to each work place. Last year alone the expenditure for spare parts was reduced 1.6-fold and 19 tons of petroleum products were saved. The level of profitability at the sovkhoz reached 110 percent.

The new economic mechanism permits broad use of the experience of these and other leading collectives. A discussion with N.T. Borchenko (SELSKAYA ZHIZN for 3 June) revealed the principles of planning under the new conditions. How specifically are they broken down as applied to kolkhozes and sovkhozes? RAPO [rayon agro-industrial association], on the basis of the norms, brings the farms control figures for purchases of goods, capital investments and supplies of basic types of material resources. On their basis, the kolkhozes and sovkhozes independently work out a draft of the plan for sale of agricultural products, requisitions for supply of material-technical resources and the volumes of contracting construction-installation work. If the farm's outlines differ considerably from the control figures, it presents the justification of certain positions to the administrative organs. In consideration of the proposals from the places, RAPO precisely defines and takes the farms a firm plan, approved by the Rayon Council of People's Deputies, for purchases of goods by year for the five-year plan, as well as the limits of capital investments and supplies of basic material resources.

The kolkhozes and sovkhozes are granted the right to plan, independently, the sowing areas for agricultural crops and their yield, the number of livestock and their productivity and the gross production output for raising plants and livestock. Their rights to sell their products are expanded. They may sell to consumers' cooperative organizations and at kolkhoz markets--with credit for fulfillment of the plan for prices according to the agreement--up to 30 percent of the planned volume of purchases of potatoes, vegetables, melons, fruits and berries and table grapes. The farms can also use above-plan output at their own discretion and for other needs. It ensues from this that it is not permitted to give the kolkhozes and sovkhozes assignments for above-plan sale of goods to the state.

Possibilities of raising their income have now increased at the farms. Markups to the purchase prices for grain sold above the average yearly level of the 11th Five-Year Plan are increased to 100 percent. This measure alone makes it

possible now to increase the farms' incomes by 1.3 billion rubles. The list of products for which markups are paid in the amount of 50 percent has been expanded. Markups are being maintained for the purchase prices for agricultural enterprises operating under poorer natural and economic conditions. The amounts of insurance compensations for a shortage in yield due to natural disasters are being increased.

The rights of enterprises to dispose of capital that has been earned by them have been sharply expanded. This is above all true of the entire profit. Payments to the budget of sovkhozes and income tax from kolkhozes will be implemented according to the norms, depending on the objective conditions: the economic evaluation of the land, and provision with fixed capital and labor and other resources. Less payments to the budget and payments for the use of loans, all the remaining profit will be left to the farms and used at their discretion.

Beginning next year, the farms themselves will determine all the indicators of the plan for capital construction and will independently order the planning estimates for many projects. The sovkhozes and kolkhozes are permitted broad maneuvering of the available financial resources to carry out planned measures. More possibilities are opened to carry out construction by using the farm's own resources.

At present the principles of being able to pay one's own way and self-financing are being approved in practical work. Sovkhozes which have converted fully to self-financing, that is to carrying out production without aid from the state, are to be singled out.

This means that now one of the important tasks is to develop, for each sovkhoz and kolkhoz obtaining budgetary allotments, thoroughly substantiated measures to increase provision with their own resources. This is especially true of low-profit farms and those operating at a loss.

It should be noted that examples of business being carried out successfully under conditions, not only of self-support but also of self-financing, are now found in practically any zone of the country. Every third kolkhoz and fourth sovkhoz show a profitability of over 25 percent, on every tenth farm it exceeds 40 percent, and there are no farms operating at a loss in Estonia, Lithuania and Latvia and in Moscow, Leningrad, Lipetsk, Grodno and a number of other oblasts.

How can this kind of result be achieved everywhere? Cost accounting relations must be intensified and all units of production, right down to the work place, be encompassed by them. The new economic mechanism contributes to affirmation of this position.

The wage fund is not now planned, as before, for each enterprise from the top, according to the principle "from the level achieved," but is earned by the collective itself. Beginning in 1987 it will be formed according to norms,

stable for the five-year plan, estimated per 100 rubles of goods sold. With high labor productivity growth rates it increases, and with low ones--it decreases.

In the next two years, through intra-economic calculation, active use is to be made of the human factor in increasing production efficiency and economical use of available resources. All subdivisions and services of the farms are being converted to cost accounting. Beginning this year the work of the managers and specialists will be paid for according to evaluations (norms) from the goods sold. A great deal is to be done to develop the shop structure of the administration and the check form of monitoring expenditures.

The right granted to the farms for up to 70 percent of the savings of direct costs, to be paid in the form of a bonus to the thrifty collectives, and full compensation of an overexpenditure of resources through their wage fund must also be utilized. Thriftiness is now becoming the main reserve for intensification. The production cost of agricultural goods must be reduced 5-7 percent.

The role of new administrative organs in the rural areas now plays an exceptionally great role in ensuring cost accounting principles for farming. It is now very important to work out substantiated norms--in many ways they determine the conditions for the work of each kolkhoz and sovkhoz.

Powerful levers to effect the economic system have been put at the disposal of the agro-industrial committee. It is important to put them into effect without delay.

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## AGRO-ECONOMICS AND ORGANIZATION

### BETTER FINANCIAL MANAGEMENT IN SOVKHOZES NEEDED

Moscow FINANSY SSSR in Russian No 6, Jun 86 pp 43-49

[Article by A.N. Zakharov, senior expert, Main Administration for Financing the Agroindustrial Complex, USSR Ministry of Finance: "Beef Up Financial Influence on the Effectiveness of Sovkhoz Production"]

[Text] The agrarian policy of the CPSU at the contemporary stage is directed toward solving the most important socio-economic tasks set forth by the 27th CPSU Congress and the May (1982) CPSU Central Committee Plenum: to provide high-quality foodstuffs to the public, and agricultural raw materials to industry.

Major material and financial resources are being allocated to achieve the goals outlined. Making maximum effective use of them will permit carrying out the USSR Food Program more rapidly and with fewer expenses. However, as was noted at the 27th CPSU Congress, "In recent years the role of finances in...the struggle for increasing the effectiveness of the economy has become weaker." In this connection, improving the entire economic mechanism of the agroindustrial complex, and particularly the financial methods of influence on increasing the effectiveness of sovkhoz production, is becoming an urgent question. At the same time the concept of "financial methods" defines merely the angle from which to examine the entire economic mechanism for providing financial resources to the sovkhozes, which include price formation, financing, and advancing loans.

Using financial methods for the purpose of stimulating the effectiveness of production influences in various ways the interests of society, the labor complex, and its members. Therefore, when solving specific problems priority may be given to certain financial methods, which are not used in isolation, but in conjunction with the elements of the entire system of the administration of finance.

Budget financing is one of the most effective methods of financial influence on the economy of agricultural enterprises. Budget financing of special-purpose programs in agriculture permits rapidly implementing specialization and concentration of production and increasing its effectiveness. For an example, one may cite the creation of the highly-developed poultry industry in our country, which has permitted solving the problem of supplying poultry products to the public. Budget financing of construction of complexes for producing animal products on an industrial basis played a major role. Budget financing of housing and cultural-domestic construction in the rural area is also very important.

At the same time the large-scale measures taken in recent years to increase the effectiveness of agricultural production and the associated periodic increases in procurement prices have brought about major changes in the role and the significance of budget financing in the economy of the sovkhozes.

The increased procurement prices since 1983 and the supplement to them for production sold to the state by sovkhozes with low profit margins and those operating at a loss, and the corresponding increase in profits, have brought about significant reductions in the size of budget appropriations: the proportion of their own sources has increased by 16 points, and amounts to more than 70 percent of the amount of the resources directed toward expanding production.

The structure of budget appropriations allocated to the sovkhozes in the system of the former USSR Ministry of Agriculture has also undergone significant changes. First of all the proportion of the budgeted resources directed toward financing capital investments has increased from 58 to 69 percent, and the appropriations for debt liquidation and for covering the losses of the sovkhozes have decreased proportionally.

These changes were reflected in the financial plans of the sovkhozes for 1984 and 1985 and on the whole can be considered a positive development in their economy, inasmuch as the basic part of the budget appropriations is directed toward direct financing of construction of industrial projects, housing and other projects for socio-cultural and domestic purposes, and not for covering losses or liquidating indebtedness for loans to sovkhozes with low profit margins and those operating at a loss.

At the same time the increase in profits and profitability of sovkhozes brought about increasing possibilities for production on the basis of genuinely autonomous financing, and consequently required examining from a different aspect the role of budget appropriations as a factor for providing conditions for autonomous finance activities.

We shall examine the significance of budget appropriations as the source of financing expenditures for capital investments. On the basis of the present procedure their financing at the sovkhozes rests on two determining principles: the level of profitability of the farm and the nature of the construction project. These principles determine the structure of the sources of financing capital investments on the sovkhozes.

In 1982 budget appropriations covered almost half (49 percent) of the volume of capital investments carried out on the sovkhozes; 10 percent went to the share of the loans, 34 percent to amortization deductions, and only 7 percent to their other assets (profit, economic incentive funds). In connection with the increase in procurement prices and the growth of profits, in 1983 the proportion of budget appropriations was reduced to 44 percent, or by 5 points; and credit, by 1 point. The proportion for amortization increased by 6 points and amounted to 40 percent. The size of their other sources with respect to the volume of capital investments did not increase, although their structure was changed.

When comparing the makeup of the sources for financing capital investments for 1982 and 1983, one fact stands out--that with such a significant increase in prices the reduction of budget appropriations and the growth of their own assets seemed insignificant.

In 1983 only 18 percent of the additional profits received were directed toward financing planned measures on the sovkhozes: capital investments, growth of the norm for their own working capital, expenditures for formation of the main herd, liquidating debts and paying interest on them, and so on. Payments to the budget increased by 0.2 billion rubles. Growth in economic incentive and reserve funds owing to profits amounted to 29 percent. A large portion of the additional income received (45 percent) was directed toward reducing the losses of the sovkhozes.

In addition, the net surplus, which is the most important reserve for growth in investments of one's own means and expansion of sovkhoz production, increased by 60 percent.

Thus, in connection with the existing system of distribution of profits, the sovkhozes in the former system of the USSR Ministry of Agriculture were able to direct 1.7 billion rubles toward financing planned measures, including 0.2 billion for capital investments, from the amount of additional income received in connection with the increase. This is connected with the fact that in view of the large amount of indebtedness of sovkhozes for loans from USSR Gosbank and their low profit margins, prior to 1983 a significant portion of their profit was directed toward debt liquidation, and also for growth and making up for shortages in their own working capital. In all, an additional 0.8 billion rubles was directed toward these purposes. The given situation was something of an external factor, which had laid the conditions for the insignificant amount of additional profits directed to capital investments.

Another factor which should be considered is the existing procedure for financing capital investments on the sovkhozes, which stipulates strict regulation of the sources of financing depending on the construction project. As a result even on profitable sovkhozes when there are profits available, budget appropriations are directed toward construction of housing and other socio-cultural-domestic projects. In order to eliminate the aforementioned shortcoming in financing sovkhozes and other agricultural enterprises, in 1984 the right was granted to direct profits for construction of non-production projects included in the plan.

In 1984 this permitted directing to capital investments 0.3 billion rubles in profits more than in 1983. Correspondingly, the proportion of profits in the structure of sources of financing increased from 3.0 to 6.0 percent.

At the same time there still is a significant reserve for increasing one's own assets utilized for financing capital investments, and correspondingly reducing budget appropriations. This is primarily the profits which remain at the disposal of the farm, which in 1983 amounted to 1.6 billion rubles. However, the net profits are concentrated predominantly in a rather small number (10 percent) of highly-profitable sovkhozes. As a rule they have

established a substantial production base, have built housing, and have put the infrastructure in order; therefore, when there are no large-volume capital investments, the profits received cannot be utilized on the given farm and are held for one year as net working capital.

At the end of the year the net surplus of profits actually received is withdrawn by the higher administrative authority for redistribution, but the greater part is directed toward making up for the sovkhozes' shortages in working capital and a substantial amount is used for debt liquidation, to pay off loans made by USSR Gosbank to farms with low profit margins and those operating at a loss; only 9.0 percent is allocated for financing capital investments.

Increasing the profitability of agricultural production is the reserve for reducing the needs of the sovkhozes for budget appropriations for capital investment. As is well-known, for farms with low profit margins and those operating at a loss, preferential conditions have been established for financing, in accordance with which the lack of assets for capital investment is covered at the expense of budget appropriations.

After the sovkhozes had been given aid and their profits had increased, the list of low-profit farms and those operating at a loss was reexamined with respect to budget financing. In spite of the aid, the number of farms operating with low profit margins or at a loss, which were included on the list for budget financing, for all practical purposes declined very little, and for the RSFSR as a whole actually increased.

There are several reasons for this. First of all, with a radical reduction of the number of farms operating at a loss the indicator for aggregate profitability remained low for a large number of farms, and they continue to receive budget appropriations. Secondly, the level of economic development of farms which had previously operated at a loss and which had shown a profit only in 1983, also remains low. These sovkhozes are not well-supplied with basic resources and there is no possibility to liquidate their debts to the bank. Therefore, the list of low-profit farms includes those farms whose profits exceed the established level of 10 percent. Thirdly, republics with a relatively high level of agricultural development, for purposes of further stimulation, included in the aforementioned lists farms with profits of 15-20 percent. For example, in the Estonian SSR the 1983 level of sovkhoz profits amounted to 36 percent on the average. In connection with this the number of farms which were receiving budget appropriations for financing planned expenditures, although reduced by 50 percent, still included a large proportion whose profits ranged from 15 to 20 percent. Fourthly, under conditions of reduced profits in 1982, many farms which were actually operating at a loss or with low profit margins were not included in the list for budget financing, inasmuch as these lists are as a rule stable. When the lists were reviewed in 1983, these farms were added to them. For example, 273 were excluded in the RSFSR, but 402 sovkhozes were added; in the Ukrainian SSR the corresponding figures were 189 and 90 sovkhozes; in the Uzbek SSR, 201 and 200 sovkhozes; and so on.

Thus, reducing the proportion of budget appropriations in the makeup of sources for financing capital investments and replacing them with profits is being held up by both objective and subjective factors, among which we note in summing up: 1) the existing system of profit distribution, under which the greater portion is directed to the economic stimulus fund, to the reserve fund, and to paying off bank loans; 2) regulating the sources of financing according to the type of construction project, when even highly profitable sovkhozes have the right to finance construction of housing and socio-cultural-domestic facilities at the expense of funds from the budget; 3) concentrating the greater portion of the profits among a limited number of sovkhozes, being unable to redistribute them in the current year; and 4) the high proportion (in spite of increasing prices) of sovkhozes with a low profit margin, with a low level of fixed assets, and high indebtedness for loans from USSR Gosbank.

Amortization deductions are an important source of financing capital investments. In 1983, 0.8 billion rubles more were used than in 1982, and their proportion increased from 34 to 40 percent. Among the reasons for growth of amortization funds as sources of financing, the following points are singled out:

First of all, in 1983 amortization deductions for total restoration of fixed capital were 0.3 billion rubles greater than in 1982.

Secondly, beginning in 1983 the former USSR Ministry of Agriculture and the union republic ministries of agriculture were granted the right to redistribute amortization deductions among the sovkhozes and other state agricultural enterprises, for the purpose of total restoration of fixed assets, directing them toward financing construction projects for both production and non-production purposes. This permitted mobilizing amortization deductions for capital investments, which certain farms were unable to touch for a period of one year (the net surplus); it also permitted reducing the budget appropriations allocated to sovkhozes for construction projects for non-production purposes.

Thirdly, whereas previously up to 30 percent of the amortization deductions for the purpose of overall restoration of fixed assets was directed to the fund for building up and expanding the farm, since 1983 this fund is formed from profits only. Assets from the amortization fund were also directed toward financing capital investments in the amount of 0.5 billion rubles. Directing amortization funds toward financing projects for non-production purposes was a real source of reduction of budget appropriations allocated for this purpose.

Economic incentive funds play an important role as sources of financing capital investments. The party and the government are working toward the future goal of financing construction of housing and other socio-cultural-domestic projects exclusively by means of assets from these funds. Consequently, increasing their proportion for financing capital investments will be an important factor in reducing budget appropriations.

Although economic stimulus funds do not comprise a major part of the sources for financing capital investments, they are especially important for stimulating more effective use of funds allocated for developing agriculture.

One of the distinguishing peculiarities of economic incentive funds is the fact that a significant part of them goes toward financing capital investments carried out above the established ceiling.

In 1982 economic incentive funds made up 5.0 percent of the sources for capital investments; in 1983, 2.0 percent. The reduction in the proportion of economic incentive funds directed toward financing capital investments, along with the growth of profits, came about for various reasons.

First, the procedure was changed for the formation and use of funds for building up and expanding farms. Since 1983, as already stated, amortization deductions have not been part of these funds. In addition, the norm for deductions to the fund were reduced from 10 to 5.0 percent. As a result, in 1983, 0.3 billion rubles less were directed to the fund for building up and expanding farms (there was an 0.7 billion ruble increase due to increased profits; but there was an 0.5 billion ruble reduction in the deduction norm, and owing to the change, a reduction of 0.5 billion rubles directed toward amortization as well).

At the same time, in order to develop economic independence and initiative on the sovkhozes, since 1983 assets from the fund for building up and expanding the farms have been directed toward financing capital investments carried out over the ceilings. In connection with this at the present time assets from the aforementioned fund are not considered in the financial plans of the sovkhozes and have practically lost their significance as a fund for financing planned capital investments.

Secondly, in connection with the growth of profits, in 1983 the size of the fund for socio-cultural measures and housing construction showed a twofold increase over 1982; however, only 88 million rubles more of the assets from this fund were directed toward financing capital investments, including 76 million rubles within the limits of the ceiling. Although the proportion of the funds for socio-cultural measures and housing construction used for capital investments grew by 9 points, and by 10 points within the limits of the ceiling, there are still a number of unresolved problems in their use. The primary one consists of the fact that the largest amounts of assets of funds for socio-cultural measures and housing construction are concentrated among a limited number of highly-profitable farms which are well-furnished with housing and have a developed infrastructure and consequently do not spend the assets of the fund. As a result, its unused balance constantly increases. From the overall amount of the assets added to the fund for socio-cultural measures and housing construction in 1983, only 54 percent was spent--which is 28 points lower than the 1982 level.

As a rule, increasing the purchase prices for agricultural production places highly-profitable farms in a more favorable position, which leads to their accumulating very significant surpluses in the economic incentive funds, and

reducing the effectiveness of their use. As a result of the increase in purchasing prices accomplished in 1983, the surplus funds increased by 38 percent. At the present time the surpluses in the fund for socio-cultural measures and housing construction exceed the amounts added to this fund in the course of a year. Inasmuch as in accordance with the existing legislation surplus assets in the economic incentive fund are not subject to withdrawal by the sovkhozes, it would seem the sensible thing to adjust the amounts of the assets deducted for these funds in connection with an increase in procurement prices, in order not to permit their unjustified growth as a result of the action of the price factor.

Thus, the proportion of the economic incentive funds directed to financing capital investments depends upon many and varied factors. A most important reserve is found in the surplus assets of the fund for socio-cultural measures and housing construction, which amounts to nearly 1.4 billion rubles. In order to put these funds into circulation and to preclude further accumulation at highly-profitable farms, in 1985 it was deemed expedient to grant the higher agricultural administrative authorities the right to differentiate deductions for this fund for the sovkhozes under their administration, proceeding from the total deductions for this fund according to the establish norm--depending upon the degree to which the farms are furnished with housing, cultural-domestic facilities, the availability of transferable surplus capital in this fund, and other factors. This not only permits more effectively utilizing the assets in the fund, it also leads to savings in budget appropriations allocated to sovkhozes for housing construction, and the like.

Analysis of the problems under consideration and the state of affairs in capital construction testifies to the fact that assets allocated for the development of agriculture are not yet being used effectively enough; therefore improvements are required in the system of furnishing farms with assets for expanding production, while striving to strengthen their influence on increasing the effectiveness of sovkhoz production.

Indicators of the effectiveness of capital investments can be, for example: the increase in gross production per ruble of assets invested; the increase in production at animal husbandry complexes, with reduction of their operating costs; the increase in yield from field crops owing to use of new technology; the availability of housing to the rural populace; and so on.

Inasmuch as finances are inherently relatively independent, an analysis of their effectiveness must be carried out on the basis of the extent to which they correspond to the most important national economic principle--cost accounting. In our opinion, budget financing of capital investments contradicts one of the most important principles of cost accounting--self-support. Consequently the use of budget financing must be reduced in the future, and it should be used exclusively for solving major, nationwide problems. To the extent that budget appropriations are reduced, there should be an increase in the amount of the farms' own assets directed toward financing expenditures for expanding production, and above all, profits.

Another important social function of budget appropriations requires analysis as well, from the point of view of equalizing the levels of economic development of sovkhozes with varying degrees of profitability, providing to the farms operating with low profit margins or at a loss, normal economic conditions in which to operate. But calculations show that sovkhozes listed among those with low profit margins or those which operate at a loss have on the average 100 hectares less arable land and 70 percent less fixed capital than those with high profit margins--and at the same time they receive 65 percent less capital investments. Additionally, the indicator of overall utility and their ability to guarantee effective control over the use of budget appropriations can be an indicator for the effectiveness of the appropriations.

Experience in operating sovkhozes under conditions of complete self-financing has shown that replacing a significant part of budget assets with one's own resources and long-term credits changes the attitude of the farm administrators toward questions of the use and formation of fixed capital. On many farms planning for capital investments has improved, there was a reduction in assets frittered away on various projects, the periods for raising them were reduced, and the number of uncompleted construction projects declined. In this connection and for purposes of simplifying the procedure for financing capital investments; for more accurately and completely calculating the needs of low-profit farms and those operating at a loss for budget capital; and for ensuring their timely financing--it would be sensible to establish that on sovkhozes and other state agricultural enterprises, capital investment for production and non-production purposes should be financed at the expense of their own assets (profit, amortization funds, and others), from assets for redistribution (net profit, amortization and others), and through loans from USSR Gosbank. A loan from USSR Gosbank would be offered to the sovkhozes when their own assets and the assets for redistribution would be insufficient; the loan would be repaid within two years by means of their own capital--and when that is insufficient, by means of budget appropriations.

Replacing budget appropriations with credits from USSR Gosbank would permit reducing budget expenditures in the first two years by about 10 billion rubles. However, in succeeding years it would be necessary to stipulate the sources of liquidating the debts indicated, to include using budget appropriations as well.

This measure will lead to increasing the the loan indebtedness of the sovkhozes. However, paying off the loans which were granted would proceed with more complete accounting of one's own resources. The best use of one's own capital designated for capital investment would also promote unification of sources for financing various kinds of construction projects, for directing capital investments, and for the level of profitability of various farms.

The problems under examination for increasing the effectiveness of use of budget appropriations allocated for financing capital investments are identified with solving the task of intensification of agricultural production. Their significance is characterized both by the volume of the capital and by its purpose.

At the same time expanded agricultural production is impossible to achieve without increasing expenditures for the growth of the norm for working capital and for the formation of the basic herd. The expenditures indicated are financed by means of the farm's own assets, by borrowed and by redistributed assets; budget appropriations are allocated only for newly-organized sovkhozes and for animal husbandry complexes just put into operation.

Planned budget expenditures for these purposes in recent years have amounted to only one or two percent of the total amount of appropriations allocated to the sovkhozes. Actually their volume is even less, since the terms for putting animal husbandry complexes into operation are quite often not met, and consequently the budget assets are not distributed for growth of the norm for working capital and for formation of the basic herd.

At the same time budget expenditures for debt liquidation, allocated to low-profit farms and those operating at a loss in order to make the aforementioned expenditures, represent a significant sum. In the structure of budget appropriations allocated to the sovkhozes by the system of the former USSR Ministry of Agriculture, they amounted to 8.0 percent in accordance with the plan for 1985.

In connection with the 1 January 1983 increase in procurement prices budget expenditures for debt liquidation allocated for growth in the norm of working capital and for formation of the basic herd, were reduced by 64 percent in comparison with 1982, which testifies to their closer dependence on the level of procurement prices than under financing capital investments through the budget. This can be an additional argument in favor of advancing loans for capital investments to low-profit sovkhozes.

At the same time, starting in 1984 significant growth has been observed in budget expenditures for debt liquidation. In 1984 growth amounted to 25 percent; in 1985 it was 11 percent in comparison with 1984.

Three basic reasons are connected with the increase in budget expenditures: the worsening financial situation of the sovkhozes since 1984; the continuing increase in their loan indebtedness; and their overdue payments for previously deferred loans. In spite of the increase in prices and growth of profits in 1983, the indebtedness of sovkhozes for all kinds of loans for the designated period increased by 1.6 billion rubles, and in 1984 by an additional 0.6 billion rubles; at the same time about 60 percent of the debt was for extending the period of the loans. Considering the fact that sovkhoz profits in 1984 amounted to 9 billion rubles, and shows a tendency to decrease, in the coming years liquidating the debts for loans which have already been deferred will become one of the most acute problems in managing sovkhoz production and will to a significant extent determine the economic conditions for sovkhoz development in the 12th Five Year Plan and for years to come.

Covering the losses accruing to the sovkhozes from product sales by means of the state budget is an emergency measure. In spite of frequent increases in procurement prices in recent years, at the end of 1985 23 percent of the farms in the former system of the USSR Ministry of Agriculture were operating at a loss.

State subsidies are not consistent with the principles of cost accounting--they do not stimulate production, and they give rise to a dependent attitude; therefore, starting with the plan for 1986 subsidies have been practically eliminated. However actual losses associated with objective factors (weather conditions and the like) and with large nonproduction expenditures, greatly exceed planned subsidies. The shortage of working capital increases in like manner; that is, the financial condition of the farm becomes worse.

To a certain extent this gives rise to the existing system of planning the financial results and is associated with the so-called "problem of the turn of profits," which is characterized as follows:

The national economic plan defines only the balance of profits, but in the financial plans of the union republics, financial results are presented in detail--that is, profits are allocated to profitable sovkhozes and losses to those operating at a loss. At the same time over the course of a number of years the actual indicators are greater than the planned indicators (See table):

	(millions of rubles)							
	1981		1982		1983		1984	
	planned	actual	planned	actual	planned	actual	planned	actual
Profits of profitable sovkhozes	3899	4767	4057	5073	6966	10304	6678	8973
Losses of losing sovkhozes	911	5414	1160	5584	227	1363	242	2579
Balance (+,-)	+2988	-647	+2897	-511	+6739	+8941	+6436	+6394

Every year the profits of profitable sovkhozes and losses of the losers were greater than the planned amounts. Therefore solving the problem is possibly only by means of eliminating the actual losses of the sovkhozes on the basis of reducing the production costs and reducing nonproductive expenditures and losses. At the same time the problem of planning financial results on state farms once again demonstrates the close association between the level of procurement prices for agricultural products and expenditures from the state budget and their mutual influence on the sovkhoz economy.

The problem of compensating for losses on sovkhozes due to natural disasters and other misfortunes are also very significant; these are handled for the most part by the organs of the USSR Main Administration for State Insurance. Insurance premiums are paid by the sovkhozes from their own resources, but in the system of the former USSR Ministry of Agriculture, low-profit farms and those operating at a loss, are annually allocated 0.9 billion rubles from the state budget.

To cover losses owing to natural disasters or unfavorable weather conditions which are not compensated for by the state insurance administration, a reserve fund has been established for the sovkhozes by means of deducting 20 percent of distributed profits (In the RSFSR and Kazakh SSR the norm for deductions has been increased to 30 percent).

Assets from the reserve fund are an important source for making up for the shortages in working capital and for liquidating unserviced indebtedness to USSR Gosbank.

In connection with the increase in procurement prices and the growth of profits, conditions are much better for compensating for sovkhoz losses due to natural disasters and the like. This is first of all connected with a certain reduction in the number of losing and low-profit sovkhozes, for which funds for paying insurance premiums are allocated from the budget and, consequently, there is more complete compensation to farms which have made their payments. Secondly, the amount of the reserve fund has sharply increased. In comparison with 1982 it has increased more than twofold, and amounted to 2.6 billion rubles in 1983. Thirdly, in connection with the reduction of shortages in their own working capital on sovkhozes for the years 1983-1984, a larger proportion of the assets from the fund can be directed toward compensating losses from natural disasters.

Thus, raising the purchasing prices and the associated growth in profits and the size of the reserve fund have provided favorable conditions not only for making up for sovkhoz losses, but also for stabilizing the income and financial situation of the farms. This in turn is the prerequisite for strengthening the cost-accounting relationships on the sovkhozes.

The types of expenditures made at the expense of funds from the state budget include: operating expenses; losses from housing and municipal facilities; housekeeping and maintenance of Pioneer camps made in the form of exemptions for low-profit sovkhozes and those operating at a loss in the RSFSR and the Kazakh SSR; compensation for differences in costs for fuel delivered to the populace; and so on. The indicated expenditures are not significant, and as a rule are subsidized: the sovkhozes are compensated for expenditures not associated with their cost accounting activities.

Examination of the existing system of sovkhoz financing from the state budget permits disclosing unresolved problems and outlining ways to increase its effectiveness. At the same time the largest and most severe problems are connected with developing the financing of capital investments and liquidating debts to USSR Gosbank.

Solving all the problems enumerated is possibly only on the basis of strengthening the economy of sovkhoz production. Here the root problem is reducing the operating costs for production and on this basis increase their own sources of financing expenditures. However there are still officials who seek sources of income not in high yields and high animal productivity, and not in economic management, but in budget appropriations and bank loans. In this connection the development of financial methods of influence on the economy of the sovkhozes must be directed toward increasing the responsibility of the farms for the end results of their activities.

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## AGRO-ECONOMICS AND ORGANIZATION

### SUPREME SOVIET APK COMMISSION OFFICIALS ON AGRIPROM PROBLEMS

Moscow IZVESTIYA in Russian 14 Jun 86 p 2

[Article by O. Pavlov: "The Agriculture Industry--Its Realities and Problems"]

[Text] A lot of very interesting and unusual things happen in the realm of what is commonly called "technology". Especially when we are speaking of industrial, space or agricultural technology. But there is still another branch of technology--that of the work of the USSR Supreme Soviet.

Do we actually know very much about this particularly technology?

Yes, actually; the most pressing problems concerning the life of our country are solved; plans are approved and the country's prospects are looked over. And recently they have looked farther into the future, for the national economy is so mobile and has such great economic and resource potential that it is, as it were, somewhat like a five-year plan. Although its plan assignments are fairly rigid, we need to proceed farther faster and we need to know how to do so. The best way is whatever way is most intensive, most efficient and most economical.

And so the session makes ready to begin. The make-up of the Preparatory Deputies' commissions are discussed and approved in advance. What is the principle here?

In this case, I am discussing the meeting of the Preparatory Commission on the USSR Agro-Industrial Complex. Who are its members? Well, first of all I should say that they are committee people: party and soviet workers, experienced production workers. The deputies who form the commission work not only in their own home areas, but also work out of town checking on the carrying out of recommendations adopted by their commissions for the ministries, departments and Soviets.

In the midst of all this the decisive stage is, of course, the meeting in the Kremlin, where an impartial discussion of pressing problems is underway, and where proposals for the Supreme Soviet are being worked out.

The commission chairman plays quite an important role in this type of discussion. As a rule those who are elected to the post of chairman are those who are extremely influential in our own "parliament". And what else might be said of a person chosen for this position? In fact he and the commission he heads all talk to representatives of Gosplan, Minfin [Ministry of Finance], with ministers and with directors of major enterprises. For example, during the current session, during his first day representatives of 29 ministries and departments attended.

The resolution setting up USSR Gosagroprom [State Agricultural Industry] was drawn up. The 27th Congress put particular emphasis on the development of this most crucial sector of the national economy, into which is poured a full third of our capital investments. By the end of this five-year plan period, plans call for R454 billion in gross output. Here you have the scale of the task! What we are saying is that the agri-industry will soon become a unified whole, but meanwhile, alas, the changeover is slow in coming about.

The heavy burden of these problems is borne by the commission and its chairman.

The Commission Chairman--Fedor Trofimovich Morgun--is the first secretary of the Poltava obkom of the Ukrainian Communist Party. He has chaired commission meetings on more than one occasion, but strangely (and through no fault of his or the commission members) no quick solutions to the problems have been found.

G. Zolotukhin is minister of USSR Grain Products. (This is a department which has turned over some of its functions to Gosagroprom, but the area of procurement has remained in the hands of the ministry.) Zolotukhin says:

"We plan, during the current five-year plan period, to increase production of flour by 6 percent versus a 5 percent increase for last year. Our range of products will be diverse as well. However, the condition of the baking and macaroni foods industries, both of which came over to us from Minpishcheprom [Ministry of the Food Industry], is a cause of concern to us."

The minister went on and, to tell you the truth, surprised me:

"Recently we purchased a portion of our flour from abroad." (Author's note: We know that we import a certain portion, mostly forage grain, but we sell some of our bread grains. But flour? Here?).

Later he informed me that the problem has been resolved: "We purchased the license to manufacture high-performance equipment from some new flour-milling enterprises. They produce 75 percent of the highest grade flours. However Gosplan is trying to postpone construction of 14 plants.

We do have a transport problem. Every year we transport around a million tons of flour in bags through the country, destined for Central Asia. There, the flour-cars go unregistered as part of the operation of their established delivery system for flour and baked goods. The consumers' cooperative societies, in their role as members of the agricultural industry, should be restructured," said the minister strongly.

F. Morgun: "My dear Grigoriy Sergeyevich, I wish to pose a simple question. I recall, for example, that here in the Ukraine at one time, though not really so long ago we used to say that a farmstead had one or two mills, and a village had around six. I mean here water powered, wind powered and steam powered mills. What is your thinking about this subject?"

G. Zolotukhin: "Of course one can with interest recall a country idyll. But present day demands on the quantity and quality of our products call for other solutions."

Morgun fell silent, concentrating on the papers spread out on his table.

M. Klepikov, deputy, two-time Hero of Socialist Labor and brigade leader from the Kuban kolkhoz, located in the Krasnodar kray's Ust-Labinsk rayon:

"Last year Minzag [Ministry of Procurement] improved its operation somewhat." (Author's note: Minzag no longer exists; this conversation is from last year.) All the same the operation had a great many flaws. As before, attempts at procuring the more vigorous, harder wheats met with failure. The problem with buckwheat and millet has not been solved. What's worse, low-grade millet, having been used to feed livestock, is in short supply. A great deal of damp, weedy grain was stored at Minzag enterprises. The sector supplies the mixed feed mills with protein-vitamin additives. By all accounts everything is going well. However, during only the first quarter of this year Gosstandart rejected almost a million rubles' worth of products. The quality of our bread is such that it gets stale quickly, and its salt content is higher than normal. That segment of our population which is not supplied by mixed feed mills feeds its livestock with around four million tons of bread. This cannot be acknowledged as normal.

F. Morgun rose from his seat. Turning away from the microphone at his table, he went over to the deputies' platform:

"The question of a country idyll, about what they used, but mainly how our grandfathers and greatgrandfathers dealt with their grains, is no idle query. For myself, who have always lived in the country, water powered mills and windmills are not details from paintings. In 1942 and '43 our surviving windmills and various hulling mills saved our district from starving to death. We have a settlement called Oposhnya. Once Suvorov's soldiers stayed there--10,000 of them--as well as the local inhabitants. And every one of them was fed by a water powered mill on the Vorskla River. Now, all that is left of that mill are pitiful ruins. But there are some that are not so pitiful. But they have merely been preserved and aren't used. Who gave the order, and when was the order given to shut down these pulverizing mills, to leave tens of thousands of villages without flour?"

"Are those of us in agri-industry still planning to stick to our gargantuan mania, our importing policy? Yes, we need modern enterprises, we need them very badly for our cities and workers' settlements. But we won't feed our rural areas, where we tolerate losses of raw materials and finished products, a subject which we've already gone over."

N. Vasilyev, minister of Land Reclamation and Water Resources also emphasized his own department in his address. He gave a self-critical enumeration of long known faults: the low level of production from our irrigated and drained land, the dearth of high-output equipment and of fertilizers.

He told of a village which was underprovided (by 230,000 hectares) with irrigated and drained land, where the plan for soil improvement work was not fulfilled. However, steps have been taken to accelerate these efforts, such as the introduction of intensive production methods, a transition to planning techniques which will provide laser devices, space sounding of reclaimed land and water resource conservation.

(Author's note: All this is very inviting, reassuring. However, the deputies have turned their attention to shortcomings which are far too vital.)

N. Vasilyev. "Yes, it is no simple matter to eliminate shortcomings. We are the country's largest-scale builders. In the course of a year, we handle about R10 billion. In light of this, anything is possible. But 85 percent of our projects are turned over with marks of 'good' and 'excellent'."

(Author's note: Until recently, Minvodkhoz [Ministry of Land Reclamation and Water Resources] was almost the only department which, all by itself, designed, built and accepted its projects as well as graded them.)

P. Paskar, first deputy chairman of USSR Gosplan: "During the last five-year plan period the assignments for deliveries of equipment to villages. These deliveries exceeded those of the preceding five years. Fertilizers were sent, and the power-worker ratio in the agri-industrial complex was increased by 20 percent. There are reassuring moves evident in the development of the animal husbandry feed base. The per capita demand for meat has increased to 61 kg, and for vegetables and melons--to 102 kg.

Right now a lot of people are disturbed by the new principles for purchasing agricultural products, which are connected with the well known decree issued by the Central Committee and the USSR Council of Ministers. You know that only concerning grain is a plan shaping up for purchases over a period of years. For our remaining produce, assignments are proceeding for delivery into country-wide and republican allocations. According to our figures, if the territory was heretofore able on the average to leave around 45 percent of this produce for itself, then now we can keep up to three fourths."

Ye. Sizenko, first deputy chairman of USSR Gosagroprom and USSR minister: "As has been mentioned, we have made progress in the field of livestock breeding. We figure that the meat supply will increase thanks to beef, but increases in the pork and poultry supply will be slower. There is still less than enough grain for them. We need to get to the 250 million ton production level, and then we'll be able to intensify all our animal husbandry sectors.

F. Morgun (during a break in the meeting): "The disconnectedness which now exists within Gosagroprom is perfectly obvious. Its departments live in accordance with their own traditions and the kolkhozes and sovkhozes avoid

complications. And it is understood that one is not to display enterprise by making waves. And we slap the hands of those capable of doing something. They tell us not to wait for instructions, that there's a decree that will untie your hands. Well, there actually is such a decree! But our instructions are old. And every regional inspector who, for all the respect we throw at him, can [zamordovat] any kolkhoz chairman who tries a changeover--of not only his own facility, (which, you understand, needs it as well), but of his personnel. The central problems for the agricultural industry are strategic, i.e., the problems of scientific and technical progress, production efficiency, its capability for operating without loss, social problems, or else how to sow and reap, how many cattle to have, how many farms.

"Man, and only man is capable of all things. Only let him apprehend this, let him catch sight of his own interests. He stands at the vanguard of the country's destiny. And each person must be aware of his responsibilities--from ministers to machine operators and milkmaids. And then we will know to whom to take our complaints and demands in the first place, and the second place and the third.

"The affair is in movement in the face of all these difficulties. It would be strange to think that everything would be transformed in just a few months. There is still the matter of economics, of today's agricultural reality, of the psychology of people who for many years--and here I'm speaking the other way around--from the machine operator to the minister, have lived "from the wheel". The more you heap up, the more money you make and the more prestige you have. And that's where everything is buried. Certainly, a lot of things will not be sufficient for the village and the agricultural industry. We say that we will have an average power-worker ratio in upcoming years of 40-45 hp. And over there, "they" will have over one hundred. And will some kind of fool maintain a surplus machine? Problems, problems and more problems for agri-industry....But I'm an optimist. I believe in the business at hand!"

F. Morgun (speaking officially): "The commission, subject to discussion, will introduce the proposals to the Presidium of the Supreme Soviet. The execution of these proposals will be checked."

(Author's note: What is left? Like the commission chairman, I remain an optimist. We, each by his own means, and because of Gosagroprom, have been struggling for a long time.)

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## AGRICULTURAL MACHINERY AND EQUIPMENT

### AGROPROM SESSION HITS MACHINE BUILDING FAULTS

PM111841 Moscow SELSKAYA ZHIZN in Russia 27 Jun 86 p 1

[TASS report: "Reliable Equipment for the Agroindustrial Sector"]

[Text] The USSR State Agroindustrial Committee session held on 25 June in Moscow discussed the question "On the Creation and Production of a Machine System for the Comprehensive Mechanization of Crop Growing and Stockraising in 1986-1990."

The report by USSR Ministers A.A. Yezhevskiy and L.I. Khitrun and USSR State Agroindustrial Committee Deputy Chairman V.I. Chernovianov, and also the speeches noted that more rapid development of the material and technical base and the equipping of kolkhozes and sovkhozes with a scientifically substantiated machine system are required in order to fulfill the tasks the party has set working people in the country's agroindustrial complex.

In the course of the present and the next 5-year periods it is planned to supply agricultural production with almost 4,000 different items of equipment. This will make it possible to complete the comprehensive mechanization of basic agricultural crop cultivation and stockraising processes and to raise the level of mechanization in the remaining types of work to 80-90 percent. For example, in crop growing implementation of the machine system will make it possible to increase labor productivity 2.5 times.

At present the agroindustrial sector is supplied with more than 2,000 types of tractors, self-propelled machines, and various equipment. Their technical standard has improved.

At the same time, the session paid serious attention to major shortcomings and unresolved problems in the retooling of agriculture. The speakers recalled that a considerable amount of criticism was addressed to partners in the agroindustrial complex from the 27th CPSU Congress rostrum in connection with the unsatisfactory quality of machinery with which the countryside is supplied and the inadequate provision of tools for farms, particularly for work with high-powered tractors. By the end of 1985, kolkhozes and sovkhozes had at their disposal only half the means necessary for the comprehensive mechanization of processes in crop growing and stockraising. This is holding back the introduction of industrial technology.

At the same time, a large number of models created and recommended for serial production are not developed for years. This is the situation, for example, with DT-175S, MTZ-100/102, and MTZ-142 tractors. Some equipment under development becomes obsolete without even getting as far as the plant conveyor belt. The disproportion in the manufacture of tractors and the working machines designed to form part of a unit with them leads to unsatisfactory use of the tractor pool and increased operating outlays.

Workers at machine testing centers and agroindustrial institutes must play a considerable role in raising the standard of models created.

The need was stressed to fulfill without fail the paramount task set for machine builders by the CPSU Central Committee June (1986) Plenum--to take decisive measures immediately, without waiting for the creation of new agricultural equipment, to improve the quality of machines, making extensive use of economic, technical, moral, and material incentives for this purpose.

In resolving the problems of mechanization, an important role must be played by enterprises under the USSR State Agroindustrial Committee which, in cooperation with machine building, are expected to ensure the manufacture of the simplest machines and also work tools and appliances for series-produced equipment.

It was noted that a most important condition of the highly efficient introduction of machines lies in ensuring their competent utilization and an improvement in the general standard of agriculture. However, the professional level of machine-operator cadres is still not high enough and their training in the specifics of new designs is poorly organized. Thus, in the Turkmen SSR only 44.6 percent of machine operators are first- or second-grade.

The qualification index of tractor and machine operators in Azerbaijan, Georgia, and Kirghizia is low. It is largely due to this that norms for the use of the machine pool and mechanical tuning regulations are now always observed. As a result, machine productivity is lower than their technical potential. Notwithstanding the fact that farms have an unsatisfactory repair and maintenance base, targets for building and bringing into operation central repair shops are not being met.

A resolution adopted on the question under discussion envisages introducing intensive and industrial technologies to agricultural production, using advanced methods making it possible to considerably reduce energy consumption while performing work with quality, improving the reliability of machines and equipment, reducing the product list of technical means by creating universal designs, and also other measures aimed at improving the agroindustrial complex's technical supply.

The committee session was addressed by CPSU Central Committee Secretary V.P. Nikonorov. Participating in the session were: V.S. Murakhovskiy, first deputy chairman of the USSR Council of Ministers and chairman of the USSR State Agroindustrial Committee; V.A. Karlov, chief of a CPSU Central Committee section; and leaders of ministries and departments in the country's agroindustrial complex.

The session participants visited the Podolsk machine testing center, where they were acquainted with new models of equipment for the comprehensive mechanization of agriculture.

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## FORESTRY AND TIMBER

### IMPROVEMENT SOUGHT IN TIMBER WASTE USE

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Article by Ye. Usacheva, senior engineer in the State Control Administration of USSR Gossnab and A. Garnov, junior scientific worker at the Scientific-Research Institute of Economics and the Organization of Logistical Supply: "Wood Waste Scraps -- For Industrial Processing"/

Text/ In the Basic Directions for the Economic and Social Development of the USSR During the 12th Five-Year Plan and For the Period Up To the Year 2000, the task of achieving an improvement in the use of forestry resources is assigned to the timber, pulp and paper and wood processing industry. Towards this end, a requirement exists for raising the completeness of processing of wood raw materials and creating enterprises for the reproduction of forests and for procuring and processing wood. The production of cellulose must be increased by 15-18 percent, paper by 11-15 percent, and fiberboard panels roughly by a factor of 1.3. The plans call for the use of wood waste materials to be increased to 70-75 million cubic meters in 1990.

Here we have in mind the technological processing of all wood being procured. This includes not only the trunks of trees but also the branches, twigs and foliage and also an expansion in the consumption of low-grade and deciduous strains of trees, thus making it possible to intensify the production of effective substitutes for lumber. For example, one cubic meter of chip board panel can be obtained from 1.6 cubic meters of waste materials, which can replace 2.3 cubic meters of shaped timber or 3.6 cubic meters of lumber.

The data cited underscores the highly effective use of wood waste materials for the production of products. Even in the face of an incomplete technique or technology, the mastering of a portion of this raw material in industrially developed regions having adequate labor resources turns out to be advantageous from a national economic standpoint.

Recently the proportion of waste materials compared to the overall volume of timber materials consumed has grown in all countries, since the sharp increase in the requirements for wood raw materials, called for in the forecasts, cannot be achieved by means of round timber alone. For example, the United States of America surpasses other countries to a considerable degree in its use of the waste materials of sawmill and wood-processing enterprises. On the whole, the proportion of waste materials in the raw material balance for American industry

exceeds 40 percent. Many new plants are being planned and built for the production of cellulose and panels which will use only waste scraps as their raw material.

Canada occupies second place behind the U.S.A. in terms of its consumption volume of waste materials. This is the only country in the world where sawdust and filings constitute one fourth of all waste materials used in the pulp and paper industry.

In CEMA member states, a large quantity of the waste materials formed is consumed for the production of wood panels. An exception is Romania, where the waste materials are used mainly in the pulp and paper industry. The ChSSR and the GDR, for example, produce wall and floor panels which are made out of sawdust and cement. Construction panels made out of sawdust and gypsum are also produced in the German Democratic Republic.

In conformity with the industrial consumption of forestry resources in our country, the decisions handed down during the 27th CPSU Congress underscore the need for substantially improving the production structure of the timber, pulp and paper and wood processing industry, based upon the complete use of raw materials through the development of chemical-mechanical processing of wood.

The Communist Party is devoting special attention to the efficient utilization of lumber materials. Thus, in the decree of the CPSU Central Committee and the USSR Council of Ministers entitled "Improving the Use of Forestry Raw Material Resources" and the decree of the USSR Council of Ministers entitled "Additional Measures for Raising the Effectiveness of Use of Wood and Its Waste Scraps in the National Economy," mention is made of the insufficient contribution by the timber and wood processing industry and forestry towards developing the country's economy and raising the country's standard of living. In addition, emphasis is placed upon the need for achieving more efficient consumption of the forestry raw material resources and implementing specific measures aimed at increasing considerably the production of progressive types of timber products.

The requirement for improving the use of wood raw materials is conditioned by a number of factors. The principal ones -- constant growth in the requirements for forestry materials, an improvement in production efficiency and an increase in the production volumes for forestry products by drawing into the processing program wood waste materials which have not been used up until this time.

Given the modern level of timber procurements and existing technology, up to 100 million cubic meters of waste materials and also approximately 18 million tons of technical foliage are accumulating annually in the felling areas. The wood processing waste products are reaching 70 million cubic meters in volume. Such a large amount is the result of a low useable yield of products: in sawmill operations -- 60-65 percent, in the peeling of plywood veneer -- 40-45 and in carpentry-furniture production -- 50 percent.

The principal factors restraining the efficient use of wood waste materials -- the negligible concentration of processing operations and the great distances separating the accumulation areas from the specialized production efforts, the existence of a considerable number of low productivity sectors, incomplete use of existing production capabilities and a shortage of specialized transport

vehicles in which to ship these waste materials. Their consumption level is also adversely influenced by the absence of proper persistence and exactingness being imposed upon the enterprises by the leaders of associations, ministries and departments which procure and consume the wood raw materials.

Problems also exist in the area of price formation. It is not profitable for forestry enterprises to import sawdust and filings from remote points. Thus, in the Yaroslavl Forestry Administration the consumers pay 3 rubles for 1 cubic meter of sawdust and filings and it costs the shippers 9 rubles to transport these materials over a distance of 100 kilometers. Thus it is considerably cheaper and easier for the forestry enterprises to destroy the sawdust and filings at the sites. As a result, this same Yaroslavl Administration annually burns approximately 20,000 cubic meters of wood waste materials, including almost 14,000 cubic meters of sawdust and filings, the removal of which alone costs more than 10,000 rubles. At the same time, the Yaroslavl Brick Plant is obtaining roughly 17,000 cubic meters of sawdust and filings from Arkhangel Oblast.

Studies carried out last year at enterprises of 24 forestry ministries of union republics and oblast (kray) administrations of the RSFSR Ministry of Forestry revealed that the waste material processing tasks for 1981-1985 were fulfilled by 104.5 percent. However, sampling analysis alone within Minleskhozprom /Ministry of the Forestry and Timber Industry/ for the Lithuanian SSR, Minleskhozprom for the Latvian SSR, the Penza Forestry Administration and the Leningrad Forestry Production Association has shown that the felling area waste materials are not being taken into account nor are they being used. Instead, they are remaining in the procurement areas where they are destroyed. Accordingly, during 1984 and the first 6 months of last year, 718,000 and 355,000 cubic meters of waste materials were destroyed in the mentioned ministries and administrations. At the same time, these volumes were lowered to 9,000 and 18,000 cubic meters in statistical accounting, or 1.3 and 5 percent of the actual values.

Mention should also be made of a number of other serious shortcomings in the use of wood waste materials. Thus, in all of the organizations checked, with the exception of Minleskhoz /Ministry of Forestry/ for the Ukrainian SSR, the accounting for wood waste materials is being conducted with violations of the method for determining the resources of wood waste materials, approved in 1983 by USSR Gosplan and USSR Gosnab. As a result, a considerable amount of these waste materials remains unaccounted for. For example, a check carried out at six leskhoz's /forestry farms/ of the Sverdlovsk Administration revealed that sawdust, filings and small-scale waste materials are generally not accounted for whatsoever. In Minleskhozprom for the Latvian SSR, the waste material resources were lowered by a factor of 2.5 compared to the actual amount, in the Leningrad Forestry Production Association -- by three and in the Pskov Forestry Administration -- by a factor of nine.

In addition to crude violations in the accounting for wood waste materials, the enterprises and organizations of ministries are organizing the processing of these materials in an extremely unsatisfactory manner. In many instances, the areas are being given unjustifiably low plans for the use of this valuable raw material. Last year, for example, at the Rybinsk Timber Combine, such a plan

was at the level of 37.1 percent of the waste materials accounted for, at Pereslavl and Uglich -- 24.8 and at Rostov -- 37.8 percent. In the case of the Smolensk Forestry Administration, the 1984 plan for processing felling area waste products was only 2.4 percent of the actual volume. Last year no task was established generally for the Sverdlovsk Administration in connection with the use of wood waste products.

The fact that lowered plans were issued is also borne out by the constant over-fulfillment of such plans. Thus, in 1981, for the ministries and administrations so checked, the tasks for the processing of wood waste materials were fulfilled by 107 percent, in 1982 -- by 107.4, in 1983 -- by 104, in 1984 -- by 100.4 and during the first 6 months of 1985 -- by 102 percent. Meanwhile, analysis has revealed that the proportion of waste materials used in production declined from 54.4 percent in 1981 to 49.9 percent in 1984.

Insufficient attention is being given to observing the principal statutes set forth in the USSR Gosnab decree entitled "System and Norms for the Collection and Use of Secondary Raw Materials in Branches of the National Economy" and particularly to the sections concerned with the preparation and approval of norms for the collection and processing of wood waste materials. In the Tula, Ulyanovsk, Kuybyshev and a number of other forestry administrations, organizational-technical measures have still not been developed aimed at maximizing the processing of wood waste materials, these materials are not being accounted for properly and a passport system has not yet been introduced. As a result, a considerable portion of these valuable materials is being consigned to the dump and burned.

In the construction of new and the reconstruction and modernization of existing enterprises, the ministries and oblast administrations of RSFSR Minleskhoz at which checks were carried out are devoting very little attention to the introduction of a low-waste or waste-free technology, resource-conserving equipment or to ensuring the complete processing of the entire bulk of wood waste materials being formed. Many enterprises are continuing to orient themselves mainly towards obtaining the primary materials and this is resulting in losses of thousands of cubic meters of secondary raw materials.

During the first four years of the last five-year plan, at the ministries and forestry administrations at which a check was carried out, the volumes of wood waste materials which were destroyed and consigned to dumps increased by more than twofold. These materials were handled in an especially careless manner within the Bryansk, Smolensk, Yaroslavl, Altay and some other administrations. Moreover, the level of utilization of wood waste materials accounted for within the Bryansk Administration in 1984 amounted to only 10.7 percent and during the first 6 months of last year -- 10.2 percent. Similar shortcomings occurred at enterprises of other administrations of the RSFSR Minleskhoz and the forestry ministries of union republics.

Meanwhile, considerable reserves are available for increasing the volumes of waste materials drawn into production by making more complete utilization of the existing capabilities for processing them. For example, 38 percent of the equipment available at enterprises of the Sverdlovsk Administration is lying idle, Kurgan -- 42, Kuybyshev -- 43, Yaroslavl -- 56 and Minleskhoz for the Mari ASSR -- 70 percent.

The incomplete utilization of production capabilities within the Leningrad Forestry Production Association, for example, resulted in non-fulfillment of the production plans for technological chips for the pulp and paper and hydrolytic industry. Within the Pskov Forestry Administration, for this same reason, the plan for the production of technological chips for the production of fiberboard panels was fulfilled by 40 percent in 1984 and during the first 6 months of 1985 -- by 45 percent and for vitamin meal the figures were 48 and 68 percent respectively.

At the same time, leading collectives are searching for the means for achieving efficient management. Last year the CPSU Central Committee approved the experience of the Yugmobel, Tsentromobel and Kievdrav associations in connection with the extensive use for economic purposes of secondary wood resources. These associations are located in regions where a large number of timber consuming enterprises of various departmental subordinations are concentrated. Considerable amounts of wood waste materials are forming at each one of them, materials which were not used earlier owing to territorial and departmental isolation. But the use of a business-like approach and the initiative displayed by the work collectives, with the support of the party committees, made it possible, with minimal expenditures, to find effective forms and means for the concentration, collection and efficient processing of this secondary raw material.

Overall, during the years of the 11th Five-Year Plan, the collectives of the initiator-associations, owing to the use of local raw material sources, the introduction of a waste-free technology for the processing of forestry materials and the modernization of existing capabilities for the production of wooden panels of a lowered weight and with negligible labor and financial expenditures, made it possible to save approximately two million cubic meters of lumber. The overall economic savings amounted to more than 30 million rubles.

A solution for the problem concerned with the effective utilization of wood waste materials can be accelerated through the creation of a more improved economic mechanism, aimed at raising the economic interest of the associations and enterprises in achieving maximum use of these materials. Work associated with secondary wood resources, which has become quite extensive in recent years, is by no means always included in those managerial conditions which existed earlier.

It is known that the collection and procurement of wood waste materials are associated with higher expenditures than the procurement of quality-standardized large-scale forestry materials. However, an increase in the expenditures for timber-logging production operations is compensated somewhat by a savings in other branches. The national economic effect realized from the industrial consumption of waste materials derives from the development of enterprises which process these materials on a large scale and also from a reduction in transport expenses for shipping the forestry materials, using raw materials from local resources.

Forecasts indicate that if in the future the needs of the national economy are to be satisfied only by increasing the forestry procurements and the production of saw-timber, then the volume of imported wood will double by the year 1990. This is unrealistic from the standpoint of our forestry raw material resources.

Hence, maximum use must be made of these waste materials. According to estimates, the processing of 20 million cubic meters of branches, twigs and sawdust and filings makes it possible to conserve 120,000 hectares of timber and to save approximately 250 million rubles annually.

Special importance is being attached to territorial planning for the use of waste materials. Indeed, under regional conditions it is possible to ensure more efficient and complete utilization of natural resources and to implement a type of cooperative production in which the waste materials of some enterprises would become the raw material, semi-finished good or products for other enterprises. The all-round utilization of wood is not just a local problem of one branch, but rather it is an all-state task. Thus it must be resolved in keeping with the entire national economy.

In this regard, a large role in the efficient use of forestry resources is played by logistical supply. An economy regime cannot be restricted merely to the industrial enterprises, but rather it must include all stages in the social reproduction of material blessings, including circulation.

An analysis of the work of a number of ministries and departments in the use of secondary resources has shown that, distinct from territorial administration, branch administration has a negative side. This is mainly the departmental approach for solving production, economic and technological problems associated with the extensive use of waste materials for national economic purposes, which disrupts normal relationships among the enterprises of different ministries located in the same economic region. Departmental isolation hinders the rational and complete use of special equipment for the processing of secondary raw materials and the development of combined production.

A need has arisen for developing a clear scientific concept and approach for solving the problems concerned with the more complete utilization of wood waste materials in a region and, in the process, an optimum combination of both branch and territorial administrative methods. An important element of such an approach must be recognition of the advisability of developing a plan for controlling the secondary resources in the region and also for carrying out an experimental check on the various economic and legally sound forms for combining territorial and branch administrative principles, including forms for inter-branch control over secondary resources in a region.

It bears mentioning that at the present time the ministries and departments do not have sufficient opportunities at their disposal for utilizing their regional production reserves, since they are incapable of implementing measures of this nature. The territorial organs of USSR Gossnab will play a decisive role in organizing the work of mobilizing the regional reserves of secondary wood resources. They bear responsibility for ensuring timely, complete and high quality support, in the form of production resources, for the region's enterprises and they possess experience in the mobilization of secondary resources and also organizational potential for uncovering and utilizing them. In particular, the main territorial administrations, which have at their disposal the information required on available resources of wood waste materials at enterprises in the region and which are aware of the principal consumers for these waste materials, can and must organize the work of ensuring that they are included for processing.

In the decree of the CPSU Central Committee entitled "Serious Shortcomings in the Use of Secondary Material Resources in the National Economy," it is stated that "maximum use of secondary resources for national economic purposes is an indispensable part of economic work; under modern conditions, a savings in material resources is becoming an important source for achieving growth in production." The use of waste materials makes it possible to produce more products using the same centrally allocated funds.

We consider it advisable to carry out the following measures in order to raise the level of use of secondary wood resources. First of all, to intensify the work of uncovering, collecting, accounting for and processing wood waste materials for the additional production of products of a production-technical nature and consumer goods, while simultaneously releasing for other purposes deficit types of primary raw materials and other materials.

Secondly, this will serve to ensure a full workload for the existing capabilities for processing wood waste materials. Toward this end, the branch norms for labor, finances, capital investments and other resources should be re-examined, in order to fully take into account the expenditures for operations associated with the processing of waste materials and also for the material stimulation of their use.

Thirdly, to develop legal support for the mechanism for controlling secondary wood resources, for regulating the responsibilities of the enterprises and branches and measures for bringing action against them for having violated the established tasks. In particular, a statute is required for deliveries of wood waste materials. The absence of such a statute precludes the possibility of orienting the consumers towards being supplied with this type of raw material in a stable manner and the railroads -- towards transporting them.

Fourthly, branch and territorial (regional) principles should be combined more completely when planning the utilization of secondary wood resources.

Finally, the activities of scientific-research organizations of ministries and departments and enterprises must be directed towards the development and introduction into production of new low-waste and waste-free technological processes and equipment, for ensuring more complete utilization of raw material resources.

In the Basic Directions for the Economic and Social Development of the USSR for the 12th Five-Year Plan and for the Period Up To the Year 2000, emphasis is placed upon the need for improving considerably the use of secondary resources and production waste materials. This constitutes one means for achieving economies and for satisfying more completely the increasing requirements of the national economy for raw materials and other materials. Thus the production capabilities of enterprises for the processing of secondary resources must be developed and the conversion over to resource-conserving and waste-free technologies must be accelerated.

The enterprises must be supplied with more effective equipment if wood waste materials are to be employed for economic purposes on a more extensive scale. First of all, the series production of equipment and machines for the collection and processing of the waste materials of timber procurements and

sawmill operations and also the transporting of these materials to the consumption areas must be accelerated. Such machine systems, coordinated with one another in terms of productivity, cross country capability and technical servicing and possessing modern ergonomic qualities, are making it possible to collect and process all waste materials in an effective manner.

An all-round solution for the tasks assigned by the 27th Congress of the Communist Party of the Soviet Union will make it possible, during the 12th Five-Year Plan, to raise the level of utilization of secondary wood resources and to realize a maximum national economic effect.

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